

11 A SURVEY OF PERFORMANCE MEASUREMENT IN
DIVISIONALIZED COMPANIES IN KENYA. //

BY

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A MANAGEMENT RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF
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DECLARATION

This project is my own original work and has not been presented for a degree in any other University.

Signed Ellinami John Minja Date 12/2/1996

Ellinami John Minja

This Project has been submitted for examinations with my approval as University supervisor.

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ABSTRACT

In managing a large divisionalised company, information from the divisions to head office is essential. Such information includes performance reports conveying the performance of a division's manager or of a division as an economic entity. This study set out to survey a

DEDICATION

measurement in divisionalised companies with headquarters in Nairobi. The emphasis was on divisional autonomy, performance measurement objectives, measures used and problems faced. Data was

To my parents Mzee Yohane and Mama Morio, Brothers and Sisters for love, care and support.

The study found the level of autonomy granted to divisional heads to be generally low even in operating policy area. The consequences affecting the aspects of performance measurement covered in the study. Divisional performance is measured mainly for control purpose and provision of information for planning and strategy formulation but not often for determining remuneration to division heads though companies do not stick to just one principal measure of performance, meeting targets set in the budgets is the most used measure, with residual income return and contribution margin being rarely used. While difficulty in defining and measuring divisional performance, difficulty in defining and measuring divisions revenue and transfer pricing are not considered as major problems.

ABSTRACT

In managing a large divisionalised company, information from the divisions to head office is essential. Such information includes performance reports conveying the performance of a division's manager or of a division as an economic entity. This study set out to survey certain aspects related to performance measurement in divisionalised companies with headquarters in Nairobi. The emphasis was on divisional autonomy, performance measurement objectives, measures used and problems faced. Data was collected using a structured questionnaire which was addressed to the head of accounting department at company's headquarters. The study found the level of autonomy granted to divisional heads to be generally low even in operating policy area. The consequence was affecting the aspects of performance measurement covered in the study. Divisional performance is measured mainly for control purpose and provision of information for planning and strategy formulation but not often for determining remuneration to division heads. Though companies do not stick to just one principal measure of performance, meeting targets set in the budgets is the most used measure, with residual income and return on investment being rarely used. While difficulty in defining and measuring division's costs and difficulties in separating a division for the rest of the firm are the main problems in measuring divisional performance, difficulty in defining and measuring divisions revenues and transfer pricing are not considered as major problems.

Despite the consistency between autonomy and the aspects of performance measurement, the low level of autonomy hinders effective use of divisionalised structure. It is important that the divisional heads are granted more autonomy particularly in operating policy area. When autonomy is increased, it has to be borne in mind that the currently used measures need to change since they may fail to reflect the performance of the division.

assistance through guidance and constant advice. His tireless efforts, devotion of time and encouragement is highly appreciated. My studies were made possible through a scholarship by Deutscher Akademischer Austauschdienst (DAAD). I am indebted to the DAAD, Nairobi office and its staff - The Director, Mr. Boller; Mrs. Ginski; Mrs. Wally and Mr. Alfred to mention a few - for their assistance and help in handling issues related to the scholarship. Thank you.

I thank my employers, the University of Dar-es-Salaam for giving me a leave and members of staff of the faculty of Commerce and University of Nairobi for creating and maintaining an enabling environment throughout my studies. Special thanks go to members of academic staff, particularly Mr. Mubanga, who read and critiqued my original proposal.

I also received a lot of help in preparing this report and writing the report. I am grateful to my employer, the company, for allowing me to study and for providing me with the necessary facilities. Special thanks go to Mr. Mubanga, a friend who assisted in distribution of questionnaires and Mr. Mubanga for their assistance in typing and printing this report.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Different approaches exist in organizing activities of a business enterprise. All activities of a similar type within an enterprise may be placed under the control of a departmental head, creating a functional organizational structure. Alternatively, distinct units may be established on criteria such as product line, geographical area and customer groups to create a divisionalised organizational structure. The units in a divisionalised structure, which in turn have functional structure, are referred to by various names such as product divisions (Drury 1988), departments, product businesses or profit centers (Shillinglaw 1962) and branches. The term "division", however, has been used as a general name for a unit in a divisionalised organization structure. (Gen (1977), Hartley (1983))

The ability of a division - and its head- to exercise responsibility in a certain area (cost, revenue, profit or investment) has been the main feature of different definitions of the term "division" (Scapens and Sale 1985, Tomkins 1973, Mephram 1980, Drury 1988, Pizzey 1987, and Lynch 1986). In addition, a division should reflect a major organizational segment (Shillinglaw 1962) and its performance has to be measured (Ezzamel and Hilton 1980 and Lynch 1986). The process of creating divisions is referred to as divisionalization and it entails decentralization and delegation of discretion and authority to make important decisions by top management to

divisional heads. The extent to which discretion and authority is delegated varies from one organization to another, one division to another as well as in the functional areas. In turn divisional management must be responsible to top management for the performance of the segment of the business under its control.

Increase in size, diversity and complexity of enterprises' activities have been singled out as the main reasons behind divisionalisation (Drury 1988, Deakin and Maher 1987 and Pizzey 1987). Lynch (1986) views adoption of diversification as a strategic alternative by most firms as having significant impact on diversity and complexity of the activities. Divisionalisation is also in line with the current trend in strategic management where divisions make up strategic business units (SBUs).

Divisionalisation has both advantages and disadvantages. Key advantages pointed out by various authors in cost and management accounting literature such as Drury (1988) Tomkins (1962) Kaplan and Atkinson (1992) Horngren (1977), Hartley (1983) and Pizzey (1987) include;

- Improvement in decision making process both from the point of view of the quality of the decisions and the speed of decisions,
- Making divisional manager's activities more challenging hence providing the opportunity for him to use initiative, imagination and opportunity to achieve self fulfilment;
- Freeing top management from detailed involvement in day to day operations and enabling them to devote more effort in corporate strategic planning, and;

- Provision of training ground for future members of top management.

The disadvantages include, be quite different.

- The danger of competition among divisional managers which may have dysfunctional effects,
- Increase in costs of common services/functions, and
- Loss of some control by top management which needs to be compensated by a series of control reports.

In Lynch's (1986) view, for divisionalisation to be effective the advantages of the divisional form of organization must outweigh the disadvantages. Drury (1988) outlines three prerequisites for successful divisionalisation. First, a divisionalised structure is most suitable to companies which are engaged in several dissimilar activities which makes it difficult for top management to be intimately acquainted with all the diverse activities of the various segments of the business. Second, the activities of a division have to be as independent as possible of other divisions' activities. Third, the relation between divisions should be regulated so that no one division, by seeking its own profit, can reduce that of the company as a whole.

To reduce the impact of some of the disadvantages and ensure successful divisionalization, there is a need to create a system where information flows from divisions to top management and vice versa. Such information include performance reports which are used to convey the performance of the division's manager or

the division as an economic entity. The former is referred to as managerial performance and the latter as economic (financial) performance. The messages contained in reports for the two performances, however, may be quite different.

Measuring divisional performance - be it economic or managerial - is of significant value in managing a divisionalized firm. It provides top management with information to evaluate and make decisions on both the division and its manager. Decisions on whether to increase or maintain the investment in a division or to close it down are based on economic performance of the division. On the other hand, individual (divisional) manager's prospects in a divisionalised company, including promotion, transfer and salary rise, are based on the managerial performance.

While measuring performance may have positive motivational impact (Kaplan and Atkinson, 1992) the way this is measured may have undesirable consequences such as dysfunctional decisions and goal incongruencies (Drury 1988, and Horngren 1977). It is, therefore, important to ensure that a system of divisional performance measurement begins with a clear statement of its objectives. If the system does not have clear objectives it " may measure wrong things; management may draw wrong inferences from these measures; and the wrong actions may be taken as a consequence" (Fremgen 1972 P 473). Performance measurement is not, therefore, a problem-free exercise.

Fremgen (1972) argues that performance measurement is appropriately within the province of management accountant. On the other hand very few attempts have been made to develop

comprehensive statements of concepts and principles covering the whole field of management accounting because such statements would have to be expressed (stated) in terms so broad that they would have little significance. Writing on management accounting research, McFarland (1985) points out that the relevance of a research (in management accounting) is placed upon adding to the factual information about the accounting practice of the day. Carrying out a research will allow defining relevant concepts and stating principles for the limited area covered by each individual study.

1.2 STATEMENT OF THE PROBLEM

Measuring performance of a division seeks to determine in an objective way what the performance of the division actually is. This results into performance being expressed quantitatively such as in monetary terms or units of output. There are different measures used in measuring performance, each of which is most suited to certain circumstance such as the basis of divisionalization, the level of autonomy granted to divisional manager and the performance measurement objectives. According to Fremgen (1972) if a measure is improperly used it may do serious harm to the organization and may impede the attainment of basic goals.

Performance measurement fills-up the information need by top management by indicating not only how delegated authority is being used but also how various investments (in the divisions) are performing. This in turn forms the basis for evaluating the performance in the light of the circumstances within which the

division or manager had to perform.

The current trend for most large firms in Kenya is toward divisionalized companies engaged in both similar and dissimilar activities. Some firms are adding new products to their existing lines while others are expanding their operations through new branches. Yet others are increasing the decision making discretion to their divisions. Top management of these companies are faced with a challenge - that of managing large divisionalised companies. A question which may be raised here is how is the management of these (divisionalized) companies responding to this challenge?

This study sets out to find the current state of management of divisionalised companies in Kenya with a focus on one aspect - measurement of managerial and economic performance of the divisions.

1.3 OBJECTIVES OF THE STUDY

The main objective of this study is to find out whether divisionalised companies do measure performance of their divisions, the objectives of the performance measurement and the measures(indicators) used. In addition the study seeks to find out the extent of autonomy granted to most divisional heads so as to establish the appropriateness of the performance measures used in light of the granted autonomy.

The study also finds out problems faced by management in measuring divisional performance.

1.4 SIGNIFICANCE OF THE STUDY

The decision to carry out this study was motivated by several considerations. Firstly, historically accounting was developed to serve the owner-manager. Most of accounting researches in Kenya, however, have been directed to external parties hence overlooking the role of accounting in provision of information to management. This study can, therefore, be regarded as an eye-opener for researches in management accounting in Kenya by academics and researchers.

Secondly, top management in divisionalised firms need to be provided with information on how well they are handling divisional performance measurement in relation to other firms. This will help to assess what needs to be done to improve their current position. Divisional managers will also be made aware of how their peer's performance is measured.

Thirdly, some firms rush to establish divisionalised structure without being fully aware of the challenge they are going to face, while others are reluctant to divisionalise, despite the presence of the need, for lack of information. This study will provide information necessary in planning to move to divisionalised structure for top management of companies where there is such need.

Finally, the accounting profession in Kenya and its regulatory bodies such as the Institute of Certified Public Accountants in Kenya (ICPAK), in an attempt to improve information contained in Financial statements, may consider requiring firms to report financial information about their major segments as contained in International Accounting Standard 14.

The measures used for divisional economic performance may form the basis in developing such a requirement.

1.5. AN OVERVIEW OF THE PROJECT REPORT

This management project report consists of five chapters. The preceding discussion in this first chapter involves background information to the study, the statement of the problem, the objectives of the study and the importance of the study.

The second chapter provides a review of the pertinent literature to the study. Attention is paid to the importance of performance measurement, considerations in performance measurement and performance measures. This chapter also gives a review of relevant studies on divisionalisation and performance measurement.

The third chapter details the research design used in the study. The population of interest, the sample and sampling plan, data collection methods and data analysis techniques are specified in this chapter. Operational definitions of major items used in the study are also given.

Chapter four covers data analysis, reporting of the findings and their interpretation.

The last chapter gives a conclusion and summary of the discussion. The chapter also highlights the limitations of the study as well as suggested areas for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1. IMPORTANCE OF PERFORMANCE MEASUREMENT.

Divisionalisation entails decentralisation of decision making process in an organisation. Divisional managers are given discretion and authority to make important decisions affecting their divisions. Top management is, however, responsible for the firm as a whole. This calls for an intergration mechanism to 'hold' the divisions together. Performance measurement is one of the aspects of intergration mechanism which acts as a communication system providing feedback to top management on how the delegated authority is being used to achieve overall goals of the firm. The importance of performance measurement can, therefore, be viewed from the point of view of the relevance of the information contained in the measurement results to the top management's objectives. As argued by Dean (1966) knowing the indicators, such as net profit, is of less use unless when linked to the objectives.

Control and monitoring of division managements' activities has been singled out as the primary focus of performance measurement (Hartley 1983, Scapens 1979, Fremgen 1972, Pizzey 1987, and Solomons 1969). Performance measurement ensures that top management is aware of the actions of division managers as it gives them a reliable summary of each division's performance. It also indicates whether these actions are within the delegated authority and whether they focus on the company's objectives. According to Dean (1966) this information is useful to top

management in providing guidance to divisions' management on how to bring their performance in line with the objectives. Associating control and top management's responsibility, Scapens (1979, P.282) says;

Corporate management delegate to the divisional manager the authority to take decisions...The corporate management however remain responsible for the entire operations of the business and must exercise control over delegated activities. This control function could be implemented by setting divisional objectives reinforced by periodic reports of actual performance. Such expost reports provide the element of feedback in the control system by reporting data about the actual performance of both the controller and the controlled.

For performance measurement to be useful for control purpose consideration has to be made on the autonomy of the divisions and the measures used. Taking investment center as an example, Hartley (1983, P.706) points out that to control an investment center a manager needs to monitor the relationship between its income and investment used to generate the income. This implies that the issue of what is the best way to measure the relationship between income and investment has to be resolved.

Linked to monitoring and control is coordination of divisional activities and goals with the overall corporate goals. The indicators provided through measuring the performance of all divisions in a firm, enables top management to determine whether the overall corporate objectives are being achieved. This then, serves as a basis for reviewing the firm's periodic goals. From divisional management's point of view, performance measurement is a source of information showing them a summary of their performance which assist them in making business decisions which not only focus on the division objectives but also corporate

objectives. (Drury 1988):

Performance measurement intended to provide information for control and monitoring is referred to by Siegel and South (1978) as executive (managerial) performance. They point out five ways in which measuring this performance is of importance. These are;

- to direct top management's supervision and assistance where it is most needed and where it will be most productive,
- to shape the future executive team by indicating whom to promote whom to retain and whom to remove,
- to direct the activities of executives toward high scores on the aspects of performance on which they are measured or judged,
- to give job satisfaction directly by letting the executive know how he is doing, and;
- to provide the objective factual foundation for sound incentive compensation.

Except for the first one, the above points are associated with the motivational effect of performance measurement. According to Fremgen (1972) performance measurement is designed not only to provide a basis for evaluating the quality of the divisional managers' performance but also to motivate him to operate his division in a manner consistent with the basic goal of the total organisation. Thus performance measurement helps to ensure goal congruence and that dysfunctional decisions by divisional managers are avoided. Motivational and behavioural implications of performance measurement means that it has the potential to influence decisions (Scapens and Sale 1985) and in

turn managerial performance (Drury 1988).

The other aspect of performance measurement is intended to find out the performance of a division as an economic entity. This is seen by Pizzey (1987) as focusing on the investment in the division. He says that economic performance of a division is measured to answer the basic question 'Should the investment in this segment be increased or maintained or should the division be closed down?'. This view is also held by Hartley (1983) and Shillinglaw (1962). Hartley argues that measuring economic performance of a division using measures such as return on assets, forms and input for decision about allocation of additional resources to the division. This is when a division is an investment center. Shillinglaw on the other hand considers the primary measurement objective (for division income) as being to provide both company and division management with the basis for evaluation of division management use of company resources. The second is to provide management with a measure of profitability of the resources invested in the division. However he does not say whether the ultimate aim is for making decisions on allocation or resources.

The implication in Hartley's and Pizzey's arguments is that economic performance of a division is useful in making investment decisions. Two points are worth to note here. As investment decisions focus on the future, the existing management capabilities and the future opportunities in the division's line of business may be more relevant than the past performance indicators. Drury (1988 P.717) argues that measuring economic performance call for "... special studies at infrequent

intervals where the emphasis is on expected future results rather than the past results". With this objective in mind, performance measurement producing routine information is not desired. The second point is on the measures used to establish division's economic performance. While some measures convey information about past performance and hence inappropriate for investment, some are future oriented and provide information relevant for investment decisions.

Since performance measurement focuses on the indicators (measures), the distinction between economic performance of a division and managerial performance is rarely noticed. However the measures used and their definitions convey information about the performance being measured.

2.2 CONSIDERATION IN MEASURING DIVISIONAL PERFORMANCE.

2.2.1 Existence of Performance Measurement System.

The task of designing a divisional performance measurement system lies with the accountant, a manager or both (Drury 1988 Deakin and Maher 1987, Davidson et al 1985 and Horngren 1977). The accountant, however must be a part of the system designing team. The main reason advanced for this is that most of the measures used are financial oriented, particularly those related to profit. This has led to the divisional performance measurement system being a unit in the accounting system. While some authors (Shillinglaw 1982, Solomons 1966 and Tomkins 1973) have paid much attention to issues related to profit when designing the system, others (Dean, 1966; Fremgen, 1972; and Horngren, 1977) have given a more generalised view on what need

to be considered when designing the system.

Performance measurement and performance evaluation are sometimes used synonymously. It is worth noting, however that a distinction exists between the two. According to Fremgen (1972) performance measurement seeks to determine in an objective way what performance actually is. Performance evaluation, on the other hand, is a somewhat subjective judgement as to whether a certain performance is good or bad. This is made in the light of situational factors (Scapens 1977) and the circumstances within which the subject being evaluated had to perform. The distinction between the two requires performance measurement system to be separate from performance evaluation system. Dean(1966 P.285) argues that;

Since we must rely on top management judgement for many important evaluations and decisions, we can at least recognise that measurement is often properly separate from evaluation of such complex things as divisional financial performance, and that the evaluation is likely to be better if the measurement are made without trying to prejudge the results of a management review.

Though the two are linked in the sense that evaluation depends on the indicators provided by the measurement system, the distinction has to be taken into account when designing a performance measurement system.

The objectives of measuring divisional performance need to be the focus in designing and implementing the system. The objectives give a guide on what is to be measured and what measures to use. Top management objectives, according to Horngren (1977), provide a conceptual structure in the choice of a measure of accomplishment of divisions in a firm. This in turn should take into account the performance being measured - whether it

is of a division as an economic entity or the performance of a divisional head. According to Drury (1988), however, managerial performance has more influence in the design of the system than economic performance, since the former is measured at more frequent intervals whereas the latter is normally measured less frequently. This view is also held by Fremgen (1972) that the beginning of the system is a clear statement of objectives. While emphasizing on the need to have separate objectives from the external reporting system, Dean (1966 p 286) argues that;

...the fullest potentialities of the developing science (or art) of internal financial measurement can be best realised by being willing to take a fresh look at our reasons for measuring divisions results and then trying to lay out a measurement system with these unique purposes in mind, not merely by imitating other currently used reporting systems that were originally devised at other times for other purposes.

The measures to be used must also match with the divisions' goals both in the short run and long run. Scapens and Sale (1985) consider this as an area where attention need to be paid. They point out that one difficulty in performance is that divisional goals may be expressed in long term whereas performance measures, especially financial ones, are on periodic (short run) basis. For a measure to be effective it must reinforce the divisional goals.

The system must adopt and use standard definitions of items such as the measures and the elements making up a measure. For example if profit is one of the measure to be used a common definition of 'profit' should be used. This also extends to the definitions of cost and revenue items to be included in determination of the profit. In Horngren's (1977, P.710) words '... whatever measure is choosen, the designer must then choose

how to define items such as income or investment'.

Standard definitions enable the system achieve one of the desired performance measurement qualities - objectivity. On the other hand, use of standards may be regarded as introducing 'rigidity' in the system. This is acceptable since flexibility can be introduced in the evaluation process. As pointed out by Fremgen (1972) it is not practicable to make the measurement system so sensitive and flexible that it can cope with the effects of changing circumstances directly. Rather necessary adjustments and allowances must be part of the evaluation process.

Once measures have been identified and standards set, communication has to be made to divisional managers. It is important that divisional managers are aware that their performance will be measured (Dean 1966 and Scapens and Sale 1985), the measures to be used (Hartley 1983) and the timing of the measurement exercise (Horngren 1977). The role of divisional staff in performance measurement needs to be specified by the system designers and communicated to the divisional managers. This will ensure not only maximum cooperation from the division staff but also a common understanding of the measurement process and focus on the objectives of the exercise.

The system needs to have periodic review of the measurement process and revision of the system itself as conditions change (Shillinglaw 1962). This may be very important for a newly established system where there is a need to ensure consistency and resolve ambiguities. The reviewing exercise may call for some changes such as redefinition of items used in the measurement

process or even the objectives of performance measurement. Because of the link between some of the indicators provided by the performance measurement system and performance evaluation, it is important that divisional manager's input is sought and considered at various stages of designing the system.

2.2.2. **Divisional Autonomy**

Divisional autonomy, defined as the discretion and authority to make decisions granted to a divisional manager, is one of the important issues that need to be considered by top management when establishing a divisionalised structure. This involves two aspects- the policy and decision areas where autonomy should be granted, and the level (degree) of autonomy to be granted in the selected areas.

On the basis of areas where autonomy is granted, management accounting literature classify units in an organisation into four key groups- cost centers, revenue centers profit centers and investment centers.

Managers of **Cost centers** are given autonomy for the expenses under their control with primary responsibility for production of a product or service. Kaplan and Atkinson (1992) break cost centers into two groups on the basis of input-output relationship. These are standard cost centers and discretionary expenses centers. Standard cost centers are established mainly in manufacturing operations where for each type of output (product) a standard amount and standard cost for each cost item can be specified. Discretionary expenses centers are used where no strong relation exists between input and output or where

output are not measureable in financial terms. be regarded as
Units where costs is the only area of responsibility do not
fit in the definition of a division used in this study.

Revenue Centers exists as revenue collection points for non-trading organisations (such as tax authorities) or as sales and marketing units for trading organisation. The latter type of revenue centers are usually given discretion for setting selling prices and determining the physical volume and mix of sales (Kaplan and Atkinson 1992). This makes profit one of the possible measure of performance and hence fit in the definition of a division used in this study. This also account for the reason why some authors such as Drury(1988), O'Dea and McBride (1988) do not discuss revenue centers separated but as a form of profit centers. performance of an investment center need to be measured

Profit Centers managers are responsible for cost/expenses and revenues which gives a significant managerial discretion. Divisions in manufacturing companies, for example, are profit centers responsible for manufacturing and selling a certain product or range of products. According to Siegel and South (1978) Profit centers are the most common form of divisions.

Investment Centers are profit centers where the managers are not only responsible for costs and revenues but also for capital investment - in physical assets and working capital. The managers are therefore able to influence the size of investment (Drury 1988) and hence the size of the division (Tomkins 1973).

In defining profit center and investment center, Francia et al (1987) emphasize on the **controllability** of cost, revenue and investment items. This is also addressed by Hartley (1983) who

also points out that controllability should be regarded as relative term rather than absolute term. He argues for example, that though investment center's manager has control on most items than either the manager of a cost or profit center the '...control may not be as complete as in a one person business but it is relatively free from constraints'. This implies that full autonomy in all areas, which is the same as complete control, rarely exist. thereby not justifying the need to retain the

Though the issue of divisional autonomy is essentially a management problem rather than the accountant and the performance measurement system, it has effect on the performance measures used (Siegel and South 1978) and reporting intervals (Tomkins 1973). On the measure to be used, Siegel and South (1978) point out that performance of an investment center need to be measured by a system that combines profit and investment in a single measure of effectiveness while for profit center the system needs to measure profitability and investment effectiveness separately. According to Drury (1988 P.715);

...the most important factor relating to the delegation of authority is the effect which performance measures have on influencing managerial performance. The managers of highly autonomous divisions may be evaluated by many measures including profits and return on investment; alternatively managers of divisions with less autonomy will be evaluated on different measures.

One of the areas where divisional autonomy has raised controversy is inter-divisional transfers, particularly transfer pricing. Divisional autonomy, for example, has been linked to suboptimization of transfer pricing (Ronen and McKinney 1970 and Garrison 1991). Various suggestions have been made to resolve

this controversy. Where some authors (such as Horngren 1977) favour optimization of transfer pricing, others such as Garrison favour divisional autonomy. According to Garrison (1991, P.480), if a division is to be viewed as an autonomous unit with independent profit responsibility, then it must have control over its own destiny- even to the extent of having the right to make bad decisions. This may, however, imply complete independence of the division thereby not justifying the need to retain the division as a part of the parent firm.

Ezzamel and Hilton (1980) found in their study in UK that, though divisional managers enjoyed substantial discretion in operating decisions, capital projects and expenditures were under close supervision by top management. Scapen and Sale (1985) also hypothesized that the extent of divisional autonomy contributed to the diversity of accounting methods used in divisionalised companies. In both studies however, no attempt was made to address both autonomy and transfer pricing together.

2.3 PERFORMANCE MEASURES.

Divisional performance measures, which are the indicators of performance, can be grouped into two broad groups- accounting (financial) measures and non-financial measures.

2.3.1. Accounting (Financial) measures.

As the ultimate top management's goal is the realisation of profit by the division- whether in the short run or long run, most performance measures focus on profitability. Profitability measures are also commonly referred to as accounting/financial

measures.

At the center of profitability measures is the profit (also termed as income by Shillinglaw, 1962), expressed either in absolute terms or in a ratio (percentage) form. When these measures are being used, critical attention needs to be paid on divisional profit measurement. Shillinglaw has written extensively on this aspect. In his 1962 article, he proposed a set of postulates on which the theory of divisional income measurement is based as well as the measurement standards. Four of the postulates embody the nature and objectives of the division while one postulate focuses on divisional autonomy. The postulates act as a theoretical framework. However, he points out that they have to be tested empirically if possible. The measurement standards focus on objectivity, independence of the division, covariability, comparability, controllability, expiration of service potentials, revenue realisation and revenue-expenses matching. His view is that income measurement should be adequate to serve the objective of providing a rough measure of resource profitability with main emphasis on division income as a reflection of management performance.

In his book, Shillinglaw(1982) suggested three rules with which profit measures must comply before they are acceptable. These are summarised as:-

- (i) Divisional profit should not be increased by any action which reduces total company profit.
- (ii) Each division's profit should be as independent as possible of performance

(i) Cost efficiency and managerial decisions elsewhere in the company, and;

(iii) Each division's profit should reflect all items which are substantially controlled by the divisional management.

The postulates, standards and rules developed by Shillinglaw are generally regarded by most authors as the basis for using profitability measures in divisional performance measurement.

Rather than focusing on profit alone, Davidson et al (1985) identified three desirable dimensions of a divisional performance measure which need to be applied to all financial measures. A measure needs to;

- (i) provide a common basis for comparing and evaluating the performance of divisions operating in different situations,
- (ii) be independent from performance achieved in other parts of the firm (This is a controllability attribute), and;
- (iii) indicate as closely as possible the contribution a division makes to the companywide result.

They also suggest that managerial performance should be separated from divisional manager's performance meaning that different measures may be appropriate for each.

2.3.1.1. Profit.

Three versions of profit are used for measuring divisional performance.

(i) **Contribution Margin.**

Divisional contribution margin refers to the difference between division's revenue and variable costs attributable to the division. Kaplan and Atkinson (1992) refer this as variable contribution margin. They do not, however, specify whether all of the variable costs are controllable by the division or not. Contribution margin as a measure of performance is useful for understanding the short run cost-volume-profit relationship within the division (Kaplan and Atkinson 1992) and it is more attractive since it excludes arbitrary overhead apportionments (Drury 1988). However, it appears unsatisfactory as it ignores controllability of some fixed costs by divisional manager. Using the measure may, therefore, result into suboptimal decisions. A divisional manager may, for example, substitute expensive fixed costs (such as using capital equipment with high depreciation charge) for cheap variable costs (such as labour). This decision increases the divisions contribution margin but results in decrease in the overall firms profit which is contrary to the rules suggested for profit measurement.

(ii) **Divisional Controllable Profit.**

In determining division's controllable profit all revenues and costs controllable by divisional manager are taken into account. Kaplan and Atkinson (1992) who use the term "Controllable contribution" emphasize that "...all costs that are (1) directly traceable to the division and (2) controllable by the division manager' have to be deducted from divisions total revenue. This implies that variable costs directly traceable to

the division but not controlled by the divisional manager are excluded. Controllable profits is regarded as perhaps the best measure of divisional manager's performance as it takes care of controllability (Drury 1988). One of the difficulty with this measure is on distinguishing between controllable and non controllable fixed costs. For example, how should depreciation of assets acquired by head office but entirely at the disposal of a divisional manager be treated?. The measure may also be useful only for short run profit measurement as in the long run there are non controllable long run costs that can legitimately be assigned to the division. Ignoring non controllable costs also fails to reflect the effort devoted by the head office to the division which is important in generating the division's revenue. This view is held by Siegel and South (1987) who argue that controllable profit may not give a true reflection of reality "... since more of corporate facilities are used in working with divisions in trouble than with the divisions doing well".

(iii) **Divisional Profit.**

Divisional profit, also known as divisional total profit or net profit, takes into account all costs - fixed and variable, controllable and non controllable - attributable to a division. Thus arbitrary allocation of corporate overheads are made and shown in the division's income statement. Drury (1988) points out some studies which indicate that divisional managers are evaluated on the basis of net profit which includes arbitrary allocations of corporate overheads. Kaplan and Atkinson (1992) consider this as appropriate since allocation of overheads may

serve to alert division manager to the level of these common costs and indicate that the company as a whole is not profitable unless the revenue producing divisions generate enough contribution margin to cover a "fair share" of central general and administration costs. This measure, therefore, has more relevance for long run performance measurement than short run. The challenge is to design overhead allocation system acceptable to both division managers and top management (Greer 1966). Dean (1966 P.286) suggests, however, that instead of going to all the work of trying to calculate something like a traditional "net profit" for each division we should settle for a more simple and reliable measure. He doubts whether any routine divisional net profit computation along the traditional full-cost lines can ever mean anything useful to either the division or top management. On allocation of costs he says;

The allocation and reallocation of costs takes time and can generate many argument that serve only to undermine confidence in the measurement system at all levels.... These allocation serves absolutely no purpose in helping a division manager with the current economic or managerial decisions he has to make.

Whether divisional profit is an appropriate measure depends on the definition of profit used and the objective of focus. Louderback and Dominiak (1978), for example, argue that if a division is a profit center, divisional profit is the most comprehensive measure available for managerial evaluation. However they define profit as "...the net result of all revenue and expense items controllable by divisional manager". This definition is what is referred in this study as controllable

profit.

Drury (1988) who defines "net profit" as including allocated overheads argues that it is not acceptable for measuring managerial performance because of the arbitrarily allocated corporate overheads. Siegel and South (1978) also criticize "net profit" because it is an absolute figure. They argue that if a divisional manager also has responsibility on the invested capital, focus on a net profit figure or profit budget may relieve him of this responsibility as it does not take into account the size of the controllable investment. Put in a different way, net profit fails to include an element of the funds invested in the division and the cost to the group of those funds (Pizzey 1987) as well as comparative size of the profit.

2.3.1.2 Residual Income.

Residual income attempts to take care of some weaknesses inherent in the use of profit as a performance measure. Residual income is defined by Garrison (1991) as the net operating income that an investment center is able to earn above minimum rate of return on its operating assets. It is computed on the basis of controllability by division manager (Drury 1988) or on all items attributable to a division (Hartley 1983). Controllable residual income advocated by Drury is taken as controllable profit less a cost of capital charge on controllable investment. This measure can be applied for a division as a whole as well as for individual projects carried out by a division. The main problem however, is on determination of controllable investment and the cost of capital to be used. For example, should a company use the

whole investment under the control of divisional manager or the one which can be influenced by the divisional manager as the investment base?. What cost of capital should be used? This may be a significant problem if the divisions operate on different industries exposed to different levels of risks (Tomkins 1973). Residual income is used both as a measure of divisional performance (Solomons 1969) and for investment appraisal (Mephan 1980). Mephan goes on by arguing that residual income is only useful if used for both situations. His point (P.184) is;

if residual income is used for investment problems but not for reporting operating performance there can be an adverse effect on the quality of the investment decisions. This is particularly likely to be true where investment decision making is decentralised (that is, it is made by the division manager).

It may however be difficult to use residual income where divisions are interrelated and some investment are controlled by head office. In Scapens' (1979) view the assumptions underlying residual income imply minimal inter-divisional relations and an absence of corporate resources or a "perfect" system of transfer pricing. These conditions may not exist in the real world. (A more detailed discussion on residual income is found in Tomkins 1973).

A study by Scapens and Sale (1981) in UK and USA found that residual income ranks first in USA and second in UK as a criteria used to evaluate the performance of divisional managers. It is also advantageous from behavioural point (Louderback and Dominiak 1978).

2.3.1.3 **Return on Investment.**

Return on investment (ROI) is a relative measure of profitability that combines profit and investment in a single measure of effectiveness. As for residual income, Drury (1988) proposes that the most ideal ROI is the "return on controllable investment" which expresses controllable profit as a percentage of controllable investment. Being a relative measure, ROI enables one to make comparison with other divisions (of different sizes) as well as with different time periods. ROI seems to be the most popular measure of performance for investment centers (Dearden 1973, Louderback and Dominiak 1978, Siegel and South 1978 and Lynch 1986). Its popularity is because it is the broadest possible measure of financial performance of division manager which represents cumulative audit (evaluation) of all capital expenditure made during a division's existence. However, the argument by Lynch (1986) that computation of ROI for each division may encourage goal congruence on the part of divisional manager, seems to ignore the behavioural issue. Use of ROI may discourage division managers to invest in projects with return higher than the cost of capital (or required rate of return) but less than the existing ROI as such investment will result into decrease in the division's ROI. Such decision does not reflect congruency with the overall firm's goals since the project, if taken, will result into overall increase in firm's profit. This puts residual income in an advantageous position.

Residual income and ROI have proved to be widely used in USA and UK for investment centers (Tomkins 1973). They both, however carry forward some weaknesses inherent in profit measurement. It

may therefore, be argued that the two measures are most suitable in decisions on whether to take up a new investment (in form of a new division or project within a division) rather than for evaluating performance of operating divisions.

2.3.1.4 Other Financial Measures.

A division may have autonomy in limited areas which makes some of the financial measures mentioned earlier inadequate or inappropriate indicators of performance. Branches which do not control costs (of goods sold) but have substantial autonomy in pricing decisions, subject to minimum price set by head office, may find sales related measures more appropriate than profit. These include sales volume (in quantity or units of currency) and sales turnover ratio.

Divisional cash flows are also used as a performance measure (Scapens and Sale 1981 and Tomkins 1973). A study by Scapens and Sale (1981) comparing cash flows and profit, found that companies use cash flows in assessing division performance in both UK and USA. Cash flows were however used to a lesser extent than profits. Tomkins (1973) consider cashflows more relevant for future planning than for evaluating division's past performance.

2.3.2. Non-Financial Measures.

Most financial measures have a major weaknesses of focusing on short term objectives (Drury 1988). They are, therefore, inadequate for measuring managerial performance as they do not focus on future results that can be expected because of present managerial decisions and actions. Financial measures also fail

to measure performance in some areas (Siegel 1978, and O'Dea and McBride 1988) hence the need to use non-financial measures. These areas include labour efficiency and turnover, customer satisfaction, product quality and reliability, new products and markets and delivery schedules. Siegel and South (1978) argue that, while these (areas) may be expected to have financial implication at least over long term, their direct measurement would likely be in non financial quantities.

Targets sets in budgets are also used as indicators of performance when they are compared with actual performance. Louderback and Dominiak (1978) say that where budgets are used throughout the organisation, a valuable tool exists for assessing the performance of individual divisional manager. They however, point out that the usefulness of budgets depend on the extent to which good budgeting procedures are in effect. Continuous budgets, for example, offer a much better comparison base than long term (one time) budgets. Budgets offer a basis for comparison in wide range of areas since they include financial indicators such as profit, ROI, residual income and sales volume as well as non financial indicators. It is important to note that a low rate of target achievements is not necessarily an indicator of poor performance but may be attributable to the budgeting system and the circumstance in which a manager operates. Also, measuring divisional performance involves different aspects and use of one financial or non financial measure is likely to fail to capture some of these aspects.

2.4 STUDIES ON DIVISIONALISATION AND PERFORMANCE MEASUREMENT.

No study on divisionalisation and performance measurement has been carried out in Kenya. Studies, however, have been carried out in other countries, particularly UK and USA. The general focus of these studies has been to compare existing company practices in divisionalized companies with theoretical framework and arguments.

A comprehensive study by Tomkins (1973) in UK focused on different aspects of divisionalization and performance measurement. These included use of performance measures, divisional autonomy, transfer pricing and reporting frequency. In the study, the use of thirteen selected performance measures is linked to two measurement objectives- evaluation of division head's performance and evaluation of the part which a division plays in achieving overall corporate goals. It was found that similar measures were being used for evaluating both division head's performance and the division's role. For both objectives, return on capital employed was the most popular in both the number of companies using it and its rank in these companies. Among eight different profit concepts, controllable operating profit and net residual income before taxes were the most popular. It was also found that in evaluating the divisional head's performance, most of the surveyed companies (93 percent) used more than one measure. In this study the measures were simply ranked by the respondents. A distinguishing scale was, however not used.

On divisional autonomy the study found divisions to have a fairly high level of autonomy in operating policy but lower

autonomy in financial arrangements. Also, with exception of administering divisional budgets and determination of cost accounting methods, divisions had low level of autonomy in accounting responsibility. Comparing with a study in USA, Tomkins found that divisions in both UK and USA were fairly independent in operating policy. However, UK companies were more independent than USA in both financial arrangements and accounting responsibility. In the compared studies divisional autonomy was measured on a three level Likert scale of no, limited and full autonomy.

The study also found that all responding companies required their divisions to report to the head office at least twice a year (six monthly) with 86 percent having a reporting interval of monthly or less.

Ezzamel and Hilton (1980) sought to find a single scalar which can be used as a measure of divisional autonomy. Their study was intended to develop a scale out of an earlier study conducted in UK in 1974. In the earlier study, using a four-level Likert scale, it was found that divisional autonomy was higher in operating policy, followed by accounting and internal audit. The least autonomy was found in financing policy. These findings were not significantly different from the one reported by Tomkins. Their attempt to develop a better and more meaningful measure of divisional autonomy appears to be inconclusive. However, they made some observations. They argue, for example, that their findings are sufficiently sensible and plausible apriori ground to give use to belief that the division autonomy measure has some behavioral significance. They also view the

approach they adopted as being worthy serious considerations as an addition to the accounting scientists tool kit.

Scapens and Sale (1981) carried out two studies- one in UK and the other in USA. The studies were aimed at finding out the financial criteria used to evaluate the performance of divisional managers and the relative importance of cashflows and profit in assessing divisional performance. The studies found that profit before interest and taxes, residual income and budgets were the top three measures respectively in UK, for evaluating the performance of divisional managers. In USA the top three were residual income, budgets and profit before interest and taxes respectively. While cashflows were the least used criteria in USA, in UK it was profit after charging interest.

On cashflows and profit as criteria for assessing divisional performance most of the companies in UK (50.7 percent) indicated that the two were equally important (in USA it was 27.6 percent). In USA, 45.3 percent indicated profit to be slightly more important than cashflows. From this study it was also found that for assessing divisional performance, profit is more important than cashflows. (Only 10.4 percent in UK and 4.9 percent in USA indicated that cash flow was important than profit compared to 38.4 percent and 67.5 percent in UK and USA respectively, who indicated that profit was more important than cash flow). The concept of profit used in the study was not, however, clearly defined.

Another study in 1985 by the same authors focused on the relationship between accounting practices in divisionalised companies and certain organisational variables. Attention was

paid on two aspects- measurement of divisional performance and the control of divisional capital investment. The study used varying- level scales to measure autonomy in different areas. For example, while a five level scale (0-4) was used for purchases, a three level scale (0-2) was used for sales and selling price and two levels (0-1) used for raising new finance. This makes it difficult to compare autonomy in different areas. It is worth noting, however, that the extent of division operating autonomy and capital expenditure autonomy were found to be associated with inter-connectedness of divisions. Because of the small size of most Kenyan firms, the population of this study has been narrowed down to divisionalised firms in Kenya. The Kenya Business Directory (1994) and Kenya Directory of Manufacturing Industries (1992) were used as the basis for the population of the study.

3.2. THE SAMPLE AND SAMPLING PLAN

The number of divisionalised firms in Kenya is not very large and most of them have their headquarters in Nairobi. A convenient sample of forty five (45) firms in Nairobi was picked for this study. This sample is considered sufficient and convenient for data analysis purpose. Time and resources constraints were also taken into account in establishing the sample size.

3.1 POPULATION.

Researches focused on divisionalised firms conducted in UK and USA consider the population as being comprised of all firms (Scapens and Sale 1981 and 1985, Tomkins 1973, and Ezzamel and Hilton 1980). This is mainly because most firms in these countries are large hence likely to have divisions. Also, documented information, such as Times 1000 in UK and Fortune 500 in USA, exists to direct the researchers to the large firms category. Because of the small size of most Kenyan firms, the population of this study has been narrowed down to divisionalised firms in Kenya. The Kenya Business Directory (1994) and Kenya Directory of Manufacturing Industries (1992) were used as the basis for the population of the study.

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3.3. DATA COLLECTION METHOD

Primary data was used in this study. The data was collected using a structured questionnaire with closed-type questions and some few open-ended questions. (Some parts of the questionnaire were modeled along studies conducted in UK and USA by Tomkins 1973, Ezzamel and Hilton 1980 and Scapens and Sale 1981 and 1985). The questionnaire is directed to corporate accounting personnel (at company headquarters). Accounting personnel was chosen because most of the measures identified for the study are financial oriented. Heads of accounting departments are also among top managers and hence conversant with other non-financial performance measures. Some questionnaires were administered through "drop-and-pick later" system while for some, the respondents opted to return them through post. In some cases the researcher was requested to be present and assist in completing the questionnaires.

3.4. DATA ANALYSIS TECHNIQUES

Summary statistics, including tables and percentages, have be used to present the findings. Descriptive statistics such as mean scores and standard deviations have been used to analyze data based on scales. These techniques have been used in other related studies (Ezzamel and Hilton 1980 and Wilson 1994).

3.5 OPERATIONAL DEFINITIONS OF MAJOR VARIABLES

Division - A division is a major segment of a firm that handles a specific product (or product line), process, customer group or covers a certain geographical area. Reasonable autonomy is granted to its head in at least one of the following areas- revenue, profit or investment. This definition also includes segments operating under different business name or as a branch of the parent firm as well as wholly owned subsidiaries.

A divisionalised firm - This is a firm composed of at least two divisions.

Performance Measurement - This is a process of determining in an objective way the economic performance of a division and/or the managerial performance of a division's head. The indicators of performance are referred to as measures.

All completed questionnaires were usable. Where the researcher was present when a questionnaire was being completed, it was possible to get information more than the one specified in the questionnaire. This information will also be discussed in these findings.

4.1 GENERAL CHARACTERISTICS OF THE FIRMS SURVEYED

The general characteristics of the 31 firms involved in the study is presented in tables 1 to 4.

Table 1 shows that most of the firms surveyed (41.9 percent) belong to the commercial and service sector. They include firms in trade and distribution of various goods as well as those in hotel business. There are also cases of firms belonging to more than one sector. This indicates diversification which is one of

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.0. INTRODUCTION

A total of 43 questionnaires were distributed to divisionalised firms with headquarters in Nairobi. 31 firms responded by completing the questionnaires representing a response rate of 72 percent. Some firms which did not complete questionnaires sent to them were kind enough to give reasons for this. Company policy, unavailability of appropriate official to fill the questionnaire and lack of time were among the reasons given. One firm indicated that though its products give indication that it is divisionalised, it is yet to implement a formal divisionalised structure. Currently all its activities are being managed centrally.

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the conditions giving rise to the use of divisionalised structure. Only two firms from the agriculture sector were involved in the study while one is involved in both agricultural and industrial sector. This is taken as an indication that firms dealing only in agriculture have their headquarters where there major operations are situated.

TABLE 1 THE INDUSTRY OF THE FIRMS

Industry/sector	Number of Firms	Percentage
Agriculture	2	6.5
Commercial and services	13	41.9
Finance and Investment	5	16.1
Industrial and Allied	7	22.6
Agriculture and Industrial	2	6.5
Commercial/Service and Finance	1	3.2
Commercial/Service and Industrial	1	3.2
Total	31	100

TABLE 2 NUMBER OF DIVISIONS

Source Research Data

Five divisionalisation bases were reported by the surveyed firms as being used to create divisions (Table 2). The top two bases, products and geographical area, are used in about 84 percent of the surveyed firms.

TABLE 2. BASIS FOR DIVISIONALISATION

	NUMBER OF FIRMS	PERCENTAGE
Products	12	38.7
Geographical Area	14	45.2
Process	1	3.2
Product and Geographical Area	3	9.7
Product and Process	1	3.2
Total	31	100

Source : Research Data

Three firms stated that two bases were used by them. One of these firms was primarily divisionalised by products which were again divisionalised on geographical area basis. Process appears to be the least used divisionalisation base while none of the firms reported using customers as the basis for divisionalisation.

TABLE 3 NUMBER OF DIVISIONS

Number of divisions	Number of firms	Percentage
5 and less	22	71.0
6 - 10	5	16.1
11 - 15	0	00.0
16 - 20	0	00.0
More than 20	4	12.9
Total	31	100

Source: Research Data

Table 3 shows that most of the surveyed firms have small number of divisions. All of the four firms with more than twenty divisions are divisionalised on geographical area basis. Three of them are in finance and investment sector and one in the commercial and service sector. The firms involved in the study have been using divisionalised structure for a fairly long period of time. Table 4 indicates that more than 90 percent of the firms have been using divisionalised structure for more than 10 years. This period can be considered as sufficiently long to enable a firm create and operate a stable divisional performance measurement system. With only one company indicating using divisionalised structure for five years or less, the findings of this study are likely to reflect the practice which has been going on in the surveyed firms. It is worth noting that some of the firms have been using divisionalised structure since their establishment.

TABLE 4 TIME (IN YEARS) IN WHICH DIVISIONALISED STRUCTURE HAS BEEN IN USE

	Number of firms	Percentage
5 years and less	1	3.2
More than 5 up to 10 years	2	6.5
More than 10 up to 15 years	5	16.1
More than 15 up to 20 years	8	25.8
More than 20 years	15	48.4
Total	31	100

Source : Research Data

4.2. DIVISIONAL AUTONOMY

The general findings on divisional autonomy are presented in table 5(a)-(d). Some policy/decision areas included in the questionnaire were not applicable to some of the surveyed firms. Firms distributing ready made products, for example, take the technical characteristics of the products they distribute (item 1(ii)) as given. In such situation, some respondents indicated "not applicable" (N.A) or left blank space. To determine the overall degree of autonomy for the policy/decision areas scoring method, involving assignment of consecutive numerical values to the different "extents" (Likert scale) has been used. The extents of autonomy were assigned the following numerical values; full (3) substantial (2), limited (1) and no (0). These values were then used to compute mean score and standard deviation for the individual items and policy areas.

The responses on operating policy indicate that most division heads have a fairly low degree of autonomy. Six of the ten items have mean scores of less than 1.0 indicating that on average divisional heads have very limited autonomy in these items. The highest score is in determining quality of output (1.75) followed by setting divisions operating budgets. The lowest score is in setting purchasing policy and carrying major organisational changes within the division (0.67). A respondents from a firm which does not give autonomy to divisional heads in setting advertising and marketing policies and setting purchasing policy, said that these two items were handled centrally to enjoy the economies of scale. This argument may hold for other firms. However for purchasing policy the benefits of economies of scale

may not be there if the divisions are engaged in unrelated businesses. Low score in item 1 (ix) was expected because of the financial implications such decision may have.

The overall score for operating policy (1.06) indicates that limited autonomy is granted in this area. Comparing to studies by Tomkins (1973) and Ezzamel and Hilton (1980) this score is small.

	N.A					MEAN SCORE	STD DEV
i) The overall score for operating policy (1.06) indicates that limited autonomy is granted in this area. Comparing to studies by Tomkins (1973) and Ezzamel and Hilton (1980) this score is small.							
ii) Determining quality of output	3	8	8	5	6	1.32	0.97
iii) Determining quality of output	10	6	2	3	3	1.75	1.12
iv) Setting advertising and marketing policy	3	4	13	11	0	0.97	0.93
v) Determining selling prices	3	5	6	17	0	0.81	1.03
vi) Setting purchasing policy	2	3	6	16	4	0.67	0.94
vii) Appointing salaried staff (except Divisional executives)	1	6	12	11	1	0.90	0.83
viii) Forecasting and interpreting economic conditions	4	10	9	8	0	1.32	0.98
ix) Carrying out major organisational changes within the division	0	3	14	13	1	0.57	0.65
x) Setting division's operational budget	3	12	13	3	0	1.49	0.80
Operating Policy	29	68	91	105	20	1.06	0.99

Source : Research Data

TABLE 5(a) DIVISIONAL AUTONOMY: Operating Policy

	NUMBER OF FIRMS					MEAN SCORE	STD DEV
	FUL	SBS	LTD	NO	N.A		
i) Determining range of products	0	8	3	15	5	0.73	0.90
ii) Determining technical characteristics of products	3	8	8	6	6	1.32	0.97
iii) Determining quality of output	10	6	7	5	3	1.75	1.12
iv) Setting advertising and marketing policy	3	4	13	11	0	0.97	0.93
v) Determining selling prices	3	5	6	17	0	0.81	1.03
vi) Setting purchasing policy	2	3	6	16	4	0.67	0.94
vii) Appointing salaried staff (except divisional executives)	1	6	12	11	1	0.90	0.83
viii) Forecasting and interpreting economic conditions	4	10	9	8	0	1.32	0.99
ix) Carrying out major organisational changes within the division	0	3	14	13	1	0.67	0.65
x) Setting division's operational budget	3	12	13	3	0	1.49	0.80
Operating Policy	29	65	91	105	20	1.06	0.99

Source : Research Data

Table 5(b) DIVISIONAL AUTONOMY : Financing Policy

	NUMBER OF FIRMS					MEAN SCORE	STD DEV
	FUL	SBS	LTD	NO	N.A		
i) Determining credit terms and cash discounts	2	6	11	12	0	0.94	0.91
ii) Selling and leasing divisional assets	1	2	7	20	1	0.47	0.76
iii) Arranging external short term borrowings	2	2	2	24	1	0.40	0.88
iv) Arranging external long-term loans	1	1	2	26	1	0.23	0.67
v) Determining remuneration policy for employees	1	3	11	15	1	0.67	0.79
Financing Policy	7	14	33	97	4	0.45	0.83

Source : Research Data

On financing policy, the findings indicate that little autonomy is given to divisional heads in this area. As expected, financial arrangements items (2(iii) and (iv)) are made by head office. Division heads are, however, given limited autonomy in determining credit terms and cash discounts. The low score for item 2(v), determining remuneration policy for employees, is consistent with the low score in item 1(vii), appointing salaried staff except divisional executives. The control of item 2(v) by head office implies uniformity in remuneration policy for employees in all divisions.

Table 5(c) DIVISIONAL AUTONOMY : Investment Policy

	NUMBER OF FIRMS					MEAN SCORE	STD DEV
	FUL	SBS	LTD	NO	N.A		
i) Specifying amount of capital expenditure in annual budgets	0	4	15	11	1	0.77	0.67
ii) Choosing capital projects within capital expenditure limits	0	5	11	14	1	0.70	0.74
Investment Policy	0	9	26	25	2	0.73	0.70

Source : Research Data

Table 5(d) DIVISIONAL AUTONOMY : Accounting and Internal Audit

	NUMBER OF FIRMS					MEAN SCORE	STD DEV
	FUL	SBS	LTD	NO	N.A		
i) Administering the divisional budget	6	13	10	1	1	1.80	0.71
ii) Determining methods of budgetary control	2	8	15	5	1	1.23	0.80
iii) Determining internal audit procedures	1	0	10	19	1	0.43	0.67
iv) Determining the form of reports prepared to show the state of divisional activities	2	2	17	10	0	0.89	0.79
v) Determining cost accounting methods	3	4	8	13	3	0.89	1.01
Accounting and Internal Audit	14	27	60	48	6	1.05	0.94

Source: Research Data

Table 5(c) and (d) relate to autonomy regarding investment policy and accounting and internal audit. Scores for both individual items and overall investment policy are below 1.0 indicating a degree of autonomy which is regarded as very limited. The range of scores for the two items in this policy area is small indicating close relationship between the two items. Absence of full autonomy being given to divisional heads in this area means that none of the divisions in the surveyed firms can be regarded as a full investment center.

The item with the highest mean score for all policy/decision areas is found in accounting and internal audit area. Administering the divisional budget has the highest mean score (1.8) and the smallest coefficient of variation (0.44) indicating existence of common view among top management regarding this item. This score is consistent with those for items 1(x) and 4(ii) involving setting division's operational budget and determining methods of budgetary control, respectively. These items also have one of the lowest coefficients of variation. Being the only items related to operational budgets and budgetary control, it can be argued that top management give more than limited autonomy in this area in recognition of the need for divisional heads to participate in setting and implementing operational budgets. Linked to this is the autonomy in forecasting and interpreting economic conditions (item 1(viii) with a mean score of 1.32).

Low score in determining internal audit procedures (0.43) was expected since internal audit is regarded as one of control mechanism used by top management on divisions' operations.

However there is an extreme case where full autonomy is given to divisional head in this area. For the remaining firms the autonomy given is either limited or no autonomy at all.

Degree of autonomy was also analyzed on the basis of the two divisionalisation bases which were found to be the most commonly used, which are products and geographical area. The results are present in table 6(a)-(d) and 7(a)-(d). The findings indicate that firms divisionalised on product basis give more autonomy to divisional heads than those divisionalised on geographical area. While 18 of the 22 items have mean scores of more than 1.0 where products are used as divisionalisation base, only four items have a mean score of more than 1.0 for those divisionalised on geographical area. The general pattern and the ranking of the policy areas are however the same for the two bases. Items with high scores in their respective policy areas such as 1(iii), 2(i) and 4(i) have also high scores when the firms are grouped on the two divisionalisation bases.

divisional executives)						1.17	1.00
viii) Forecasting and interpreting economic conditions	3	6	3	0	0	2.00	0.74
ix) Carrying out major organisational changes within the division	0	3	9	0	1	1.27	0.47
x) Setting division's operational budget	2	5	4	1	0	1.67	0.58
Operating Policy	21	40	34	12	8	1.56	0.93

Source: Research Data

TABLE 6 DIVISIONAL AUTONOMY FOR COMPANIES DIVISIONALISED ON

PRODUCTS BASIS

6(a) Operating Policy

NUMBER OF FIRMS

	FUL	SBS	LTD	NO	N.A	MEAN SCORE	STD DEV
i) Determining range of products	0	7	1	3	1	1.36	0.92
ii) Determining technical characteristics of products	2	5	2	1	2	1.80	0.92
iii) Determining quality of output	5	2	1	2	2	2.00	1.25
iv) Setting advertising and marketing policy	3	2	5	2	0	1.50	1.09
v) Determining selling prices	3	3	4	2	0	1.58	1.09
vi) Setting purchasing policy	2	3	3	3	1	1.36	1.12
vii) Appointing salaried staff (except divisional executives)	1	4	3	3	1	1.17	1.00
viii) Forecasting and interpreting economic conditions	3	6	3	0	0	2.00	0.74
ix) Carrying out major organisational changes within the division	0	3	8	0	1	1.27	0.47
x) Setting division's operational budget	2	5	4	1	0	1.67	0.88
Operating Policy	21	40	34	17	8	1.58	0.96

Source: Research Data

TABLE 6(b) Financing Policy

	NUMBER OF FIRMS					MEAN SCORE	STD DEV
	FUL	SBS	LTD	NO	N.A		
i) Determining range of products	2	4	4	2	0	1.50	1.00
ii) Selling and leasing divisional assets	1	1	4	5	1	0.82	0.98
iii) Arranging external short term borrowings	2	1	1	7	1	0.82	0.98
iv) Arranging external long-term loans	1	1	1	8	1	0.55	1.03
v) Determining remuneration policy for employees	1	3	4	3	1	1.18	0.98
Financing Policy	7	10	14	25	4	0.98	1.07

Source: Research Data

TABLE 6(c) Investment Policy

	NUMBER OF FIRMS					MEAN SCORE	STD DEV
	FUL	SBS	LTD	NO	N.A		
i) Specifying amount of capital expenditure in annual budgets	0	2	7	2	1	1.00	0.63
ii) Choosing capital projects within capital expenditure limits	0	3	6	2	1	1.09	0.70
Investment Policy	0	5	13	4	2	1.05	0.65

Source: Research Data

TABLE 6(d) Accounting and Internal Audit

NUMBER OF FIRMS

	FUL	SBS	LTD	NO	N.A	MEAN SCORE	STD DEV
i) Administering the divisional budget	3	3	5	0	1	1.82	0.87
ii) Determining methods of budgetary control	1	4	5	1	1	1.45	0.82
iii) Determining internal audit procedures	1	0	3	7	1	0.55	0.93
iv) Determining the form of reports prepared to show the state of divisional activities	1	2	6	3	0	1.08	0.90
v) Determining cost accounting methods	3	2	2	4	1	1.36	1.29
Accounting and Internal Audit	9	11	21	15	4	1.25	1.02

Source: Research Data

TABLE 7(a) DIVISIONAL AUTONOMY FOR COMPANIES DIVISIONALISED ON GEOGRAPHICAL AREA BASIS

7(a) Operating Policy		NUMBER OF FIRMS					MEAN SCORE	STD DEV
		FUL	SBS	LTD	NO	N.A		
i)	Determining range of products	0	0	1	9	4	0.10	0.70
ii)	Determining technical characteristics of products	0	1	4	5	4	0.60	0.70
iii)	Determining quality of output	3	3	4	3	1	1.46	1.13
iv)	Setting advertising and marketing policy	0	1	6	7	0	0.57	0.65
v)	Determining selling prices	0	0	2	12	0	0.14	0.36
vi)	Setting purchasing policy	0	0	2	9	3	0.18	0.40
vii)	Appointing salaried staff (except divisional executives)	0	2	8	4	0	0.86	0.66
viii)	Forecasting and interpreting economic conditions	0	3	5	6	0	0.79	0.80
ix)	Carrying out major organisational changes within the division	0	0	5	9	0	0.36	0.50
x)	Setting division's operational budget	0	7	5	2	0	1.36	0.74
Operating Policy		3	17	42	66	12	0.66	0.79

Source: Research Data

TABLE 7(b) Financing Policy

	NUMBER OF FIRMS					MEAN SCORE	STD DEV
	FUL	SBS	LTD	NO	N.A		
i) Determining credit terms and cash discounts	0	1	6	7	0	0.57	0.65
ii) Selling and leasing divisional assets	0	0	3	11	0	0.21	0.43
iii) Arranging external short term borrowings	0	1	1	12	0	0.21	0.56
iv) Arranging external long-term loans	0	0	1	13	0	0.57	0.65
v) Determining remuneration policy for employees	0	1	6	7	0	0.57	0.65
Financing Policy	0	3	17	50	0	0.33	0.56

Source : Research Data

Table 7(c) DIVISIONAL AUTONOMY : Investment Policy

	NUMBER OF FIRMS					MEAN SCORE	STD DEV
	FUL	SBS	LTD	NO	N.A		
i) Specifying amount of capital expenditure in annual budgets	0	1	7	6	0	0.64	0.63
ii) Choosing capital projects within capital expenditure limits	0	1	5	8	0	0.50	0.65
Investment Policy	0	2	12	14	0	0.57	0.62

Source: Research Data

TABLE 7d) Accounting and Internal Audit

	FUL	SBS	LTD	NO	N.A	MEAN SCORE	STD DEV
i) Administering the divisional budget	2	8	3	1	0	1.79	0.80
ii) Determining method of budgetary control	0	4	8	2	0	1.14	0.66
iii) Determining internal audit procedures	0	0	7	7	0	0.50	0.52
iv) Determining the form of reports prepared to show the state of divisional activities	0	0	9	5	0	1.64	0.55
v) Determining cost accounting methods	0	1	3	8	2	0.42	0.67
Accounting and Internal Audit	2	13	30	23	2	0.91	1.80

Source: Research Data

In general the study found out more autonomy to be given in operating policy, followed by accounting and internal audit with least autonomy being in financing policy. This ranking is similar to the one found by Tomkins (1973) and Ezzamel and Hilton (1980). The overall mean scores found in this study are however lower. Ezzamel and Hilton who used a scale of 1,2,3 and 4 for No, limited, substantial and full autonomy respectively, found a mean score of 3.0 for operating policy indicating substantial autonomy to division heads. Operating policy in this study has a score of 1.06 which indicates that the autonomy given here is only limited. The overall score for all policy areas combined is 2.6 in Ezzamel and Hilton's study which is between limited and

substantial while in this study it is only 0.91 which is very limited. This indicates that there is a difference in the level of autonomy given in the two countries where the studies have been carried out.

TABLE 8 MEAN SCORE IN AUTONOMY FOR INDIVIDUAL FIRMS

CATEGORY	DESCRIPTION	Number of Firms	Percentage
A	Score less than 0.5	9	29.0
B	Score of 0.5 and above but less than 1.0	10	32.2
C	Score of 1.0 and above but less than 1.5	8	25.8
D	Score of 1.5 and above but less than 2.0	2	6.5
E	Score above 2.0	2	6.5
TOTAL		31	100

Source: Research Data

Mean score in autonomy for individual firms has been calculated and presented in table 8. These mean scores were not computed on all 22 items but on the basis of items applicable to each individual firm. While 19 firms (67 percent) give very limited autonomy to most of their divisional heads it is only 2 firms (6.5 percent) which give substantial or more than substantial autonomy to their division heads. The study by Ezzamel and Hilton does not categorise the firms surveyed on the basis of autonomy levels. However their lowest mean score was 1.5 which, according to their scale, is half-way between no and

limited autonomy. In the researcher's view this degree represents fairly low autonomy.

The overall scores in autonomy as well as individual firms' scores are generally low. There could be several possible explanations for this. As indicated earlier, firms divisionalised on products basis seem to give more autonomy to their divisions than those divisionalised on geographical area. Based on the information contained in table 9 a test for independence was made to test the hypothesis;

H₀: Divisional autonomy is independent of the basis for divisionalisation.

This hypothesis was rejected at $\alpha = 0.05$ (Appendix 3) implying that inclusion of companies divisionalised on geographical area may be the cause of the low overall score in autonomy. Most of units divisionalised on geographical area are treated as branches of the head office especially where they deal with products or services similar to those handled by head office. Very little autonomy is given to heads of such units.

**TABLE 9 CLASSIFICATION OF NUMBER OF FIRMS ON THE BASIS OF
DIVISIONAL AUTONOMY AND DIVISIONALISATION BASE**

AUTONOMY CATEGORY/BASE	PRODUCT	GEOGRAPHICAL AREA
A	1	5
B	2	7
C	6	2
D	1	0
E	2	0
TOTAL	12	14

Source: Research Data

4.3. OBJECTIVES OF PERFORMANCE MEASUREMENT

Table 10 presents the finding of objectives of performance measurement. Control has the highest mean score - with all firms indicating that it is either important or very important objective. This is a reflection of the low degree of autonomy given to divisional heads which requires close supervision by head office. Among the objectives listed in the questionnaire, planning and strategy formulation has the second highest score. This may suggest existence of central planning by head office. However as indicated earlier, divisions have substantial autonomy in operational budgets and forecasting economic conditions. The implication here is that though division heads have autonomy in operational budgets, head office needs to have information to formulate planning policies as well as supervise division heads in their planning process. The second implication is that while division heads have autonomy in operational budgets which mainly cover short time planning horizon, performance measurement is essential to top management in formulating long term plans and

strategies.

TABLE 10 PERFORMANCE MEASUREMENT OBJECTIVES

	VI	I	NI	NO	MEAN SCORE	STD DEV
i) Planning and strategy formulation	18	12	0	1	2.52	0.67
ii) Investment Decision	13	9	7	2	2.06	0.95
iii) Control	24	7	0	0	2.77	0.42
iv) Managerial Performance	14	14	2	1	2.32	0.74
v) Managerial Renumeration	10	9	8	4	1.81	1.03
vi) Profitability	4	2	0	0	2.67	0.52

Source: Research Data

Investment decision is regarded as an important objective. The low level of autonomy by divisional heads in investment suggests that investments decisions are made by top management hence making investment decision as a very important objective. It is important however to discuss investment decisions not only in the light of the objectives of performance and autonomy but also in the light of performance measures used. This will be discussed a latter section.

Performance measurement also seems to be associated more with managerial performance than managerial remuneration. While

divisional performance may be used, for example, to make decisions such as promotion, the findings show that performance linked remuneration is not common among the surveyed firms. High degree of control and absence of performance linked remunerations enhance goal congruence and avoid dysfunctional decisions. On the other hand it lacks positive motivational effect on divisional heads with a likely effect of inhibiting managerial capabilities. Profitability was not included as an objective in the questionnaire. This was based on the argument that divisions profit is regarded as an overall objective and that the need is to focus on the usefulness of information contained in the measurement results. It also presuppose the use of profit measures. Six firms, however, indicated profitability to be either important or very important. None of these firms stated why they want to know the profit figure.

4.4 PERFORMANCE MEASURES USED

The general observation on the use of the measures is that firms do not stick to just one principal measure of divisional performance. All responding firms use at least five of the eleven measures given in the questionnaire (Table 11). This agrees with the argument that the use of one measure - financial or non financial - can hardly be able to cover all aspects of performance being measured.

TABLE 11 USE OF PERFORMANCE MEASURES**Companies using:**

All measures (11)	8
10 measures	3
9 measures	9
8 measures	6
7 measures	2
6 measures	2
5 measures	1
Less than 5 measures	0
Total	37

Source: Research Data

The number of firms using each measure at different extent and the corresponding mean score for each are presented in table 12. The mean scores have been computed using a five-level Likert scale with the following values; Not at all (0), a little (1), somehow (2), to a reasonable extent (3) and to a great extent (4).

Meeting targets set in budgets has the highest mean score (3.51) followed by sales in shillings. (3.45). Residual income with a mean score of 1.19 appears to be the least used measure. It is also observed that while the two highest scoring measures have the lowest coefficient of variation (less than 0.3), residual income has the highest coefficient of variation (more than 1.2). This indicates high level of consensus among the surveyed firms on the top scoring measures. The popularity of targets set in budgets is attributable to the fact that budgets are capable of including a wide range of financial as well as non

financial measures. Thus, while budgets may be regarded as the overall measure, the actual measures are the indicators set in the budgets. The only difference when a measure, for example, sales volume, is used on its own and when it is used as an indicator in the budget is that on its own it will give an absolute indication while as a budget indicator it will give a relative measure. The latter gauges performance in terms of predetermined goals.

As budgets can be very comprehensive high score was expected for this measure. Use of budgets also indicates that divisional heads participate in the process of setting the measures going to be used to gauge their performance since budget-related items have relatively high scores in autonomy. Budgets are also useful as control tool to achieve the main objective of performance measurement.

Sales related measure have also scored highly. (Sales in shillings is the only measure which is used by all firms). These measures are appropriate only where prices are controlled by head office or divisional heads control both costs and revenues. In this latter case, sales-related measures have to be supplemented by other profitability measures. If divisional heads have significant autonomy in pricing but not in costs, the use of these measures is likely to have dysfunctional effects in decision making. For the surveyed firms, pricing decisions are significantly controlled by head office (autonomy score of 0.81) implying that sales related measures can be used.

TABLE 12 PERFORMANCE MEASURES USED

MEASURE	NUMBER OF FIRMS						MEAN SCORE	STD DEV
	TGE	TRE	SH	AL	NAA			
Sales in quantity (Units)	17	4	6	3	1		3.06	1.19
Sales in shillings	23	1	5	2	0		3.45	0.98
Contribution margin	17	5	4	0	5		2.94	1.46
Divisional total profit	13	9	4	4	1		2.94	1.16
Divisional controllable profit	8	12	5	3	3		2.61	1.24
Residual income	3	6	0	7	15		1.19	1.45
Return on investment	5	6	9	5	6		1.97	1.33
Meeting targets set in budgets	19	11	0	0	1		3.51	0.80
New products developed	3	6	3	5	14		1.32	1.45
Share of market	4	6	4	6	11		1.55	1.46
Employee turnover	4	11	8	4	4		2.23	1.21

Source: Research Data

Key To Abbreviations Used:

TRE - To a reasonable extent TGE - To a great extent

NAA - Not at all

AL - A little

SH - Somehow

The low scores for return on investment (ROI) and residual income are expected since these measures are more appropriate for investment centers. Low score in autonomy for investment

decisions and the observation that out of the surveyed firms none gives full autonomy to divisional heads in this area explain why the measures have low scores.

Profitability measures have scores which indicate that they are used almost to a reasonable extent. It has been expected that controllable profit will have scored higher than contribution margin and divisional total profits since it reflects controllability of items by divisional heads. This however, is not the case with the findings. This is regarded as a result of low autonomy meaning that it may be improper to use controllable profit where divisional heads have full or substantial autonomy in only few items. This measure will not give an adequate indication of a division's performance as an economic entity which, according to the objectives, appears to be the main focus. On the other hand while meeting targets set in budgets and contribution margin are indicators of short run performance, they are supplemented by total profit which is appropriate for long run performance measurement. Commenting on market share, which has a mean score of 1.55, one respondent said that it is not used since it is difficult to determine market share for each firm's products.

The findings show that firms use both financial and non financial measures of performance. Financial measures, however, appear to take priority over non financial measures. The popularity of the profit concept is consistent with Tomkins' (1973) study which also found share of market and employee turnover and welfare having low ranks compared to financial measures.

4.5. REPORTING FREQUENCY

All firms involved in the study require their divisions to report to head office at least quarterly (Table 13). Some firms stated that their reporting is on weekly basis while a few require daily reports. The reporting frequency shows close control by head office which is consistent with both high score in control as performance measurement objective and low score in autonomy. Where autonomy is high reporting is usually less frequent than where autonomy is low.

TABLE 13 REPORTING FREQUENCY

	Number of Firms	Percentage
Once a year	0	00.00
Six monthly	0	00.00
Quarterly	3	9.70
Monthly or less	28	90.30
Total	31	100

Source: Research Data

4.6. PERFORMANCE MEASUREMENT PROBLEMS

Findings on performance measurement problems are presented in Table 14. As expected difficulty in defining and measuring division's costs and difficulties in separating a division from the rest of the firm are the main problems. It is only two firms which do not consider measuring divisions cost a problem. These two problems are associated with cost allocation and cost apportionment. Among performance measures used is total division profit which requires allocation of general and administration expenses to divisions. When determining division's costs is a problem, the implication is arbitrary allocation of costs which

TABLE 14 PERFORMANCE MEASUREMENT PROBLEMS

MEASURE	NUMBER OF FIRMS						
	TG E	TR E	SH	AL	NAA	MEAN SCORE	STD DEV
i) Difficulties in separating a division from the rest of the firm	13	7	1	4	6	2.55	1.59
ii) Problems of transfer pricing due to interdependence of divisions	2	3	6	5	15	1.10	1.28
iii) Difficulty in defining and measuring divisions investments	2	7	7	5	10	1.55	1.32
iv) Difficulty in defining and measuring divisions							
- Costs	7	13	7	2	2	2.68	1.10
- Revenues	1	11	8	5	6	1.87	1.18

Source: Research Data

cannot be traced directly to the divisions. On the other hand low autonomy results into head office incurring some costs which could otherwise be incurred by the divisions. This makes most of the costs used to determine divisions total profit fail to reflect the division head's responsibility which in turn make division's total profit inappropriate measure of division head's performance.

Difficulty in defining and measuring divisions revenues and transfer pricing are not considered as major problems. These two problems are closely related. Where transfer pricing is a problem then it will be difficulty to determine "revenue" from

transfer made to other divisions. Almost half of the firms do not consider transfer pricing a problem at all. A comment from one firm (which is in commercial and service sector) said;

5.1. SUMMARY OF THE FINDINGS

We don't consider transfer pricing as a problem since all transfers are made at cost which is the price of the goods when acquired from outside supplier.

They did not, however, explain how other costs associated with transfers such as transport costs are handled. Transfer pricing is also not a problem for production divisions which transfer their output to other divisions if the level of autonomy is low. In this situation transfers are made at prices predetermined by head office.

The study found the level of autonomy granted to divisional heads to be generally low with most decision areas having mean scores indicating very limited autonomy. Low autonomy was also found when mean scores were computed for individual firms. These mean scores were based on only those items applicable to each firm. Though autonomy was generally low, there was difference in autonomy granted to different policy areas. Operating policy areas had the highest level of autonomy. Financing and investment policy areas are shown in the study as being controlled at corporate level rather than at division level. Difference in autonomy was also found between the two major divisionalization bases with firms divided on product basis granting more autonomy to their divisions than those divided on geographical area basis.

The need to control activities in the divisions has been found to be the main reason behind performance measurement. This is associated with low autonomy granted to divisional heads.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. SUMMARY OF THE FINDINGS.

This study whose general focus is on performance measurement in divisionalized firms has addressed four key issues related to its objectives. These issues are autonomy granted to divisional heads, objectives of performance measurement, performance measures used and problems encountered in measuring divisional performance. Data was collected, using questionnaires, from 31 firms, analyzed and findings related to the objectives made.

The study found the level of autonomy granted to divisional heads to be generally low with most decision areas having mean scores indicating very limited autonomy. Low autonomy was also found when mean scores were computed for individual firms. These mean scores were based on only those items applicable to each firm. Though autonomy was generally low, there was difference in autonomy granted to different policy areas. Operating policy areas had the highest level of autonomy. Financing and investment policy areas are shown in the study as being controlled at corporate level rather than at division level. Difference in autonomy was also found between the two major divisionalization bases with firms divisionalized on product basis granting more autonomy to their divisions than those divisionalized on geographical area basis.

The need to control activities in the divisions has been found to be the main reason behind performance measurement. This is associated with low autonomy granted to divisional heads.

With exception of managerial remuneration, other objectives have mean scores which show that they are important.

The three most commonly used measures are meeting targets set in budgets, sales in shillings and sales in quantity. Among the least used measures are residual income and return on investment which are most appropriate where divisional heads have at least substantial autonomy in investment and financing. Other least used measures are new products developed and market share.

Measures related to absolute profits are used to a reasonable extent. Firms, however, seem to use total divisional profit which involve allocation of head office costs (overheads) rather than divisional controllable profit which reflect autonomy granted to divisional heads. Non-financial measures such as employees turnover are also in use. Firms require their divisions to report to head office frequently mainly due to low autonomy granted to division heads. While difficulty in defining and measuring divisions costs and difficulties in separating a division from the rest of the firm were found to be the main problems, transfer pricing and measuring divisions revenues are not.

The relationship between autonomy and aspects related to performance measurement, therefore, requires one to consider the autonomy granted to divisional heads when designing and implementing a performance measurement system.

5.2. CONCLUSIONS MANAGERIAL IMPLICATIONS AND RECOMMENDATIONS

Advantages of divisionalisation can be realised only where adequate autonomy is granted to divisional heads. This allows them to exercise discretion in decisions in their divisions. Though head office needs to retain authority to make decisions in some areas, it is expected that division heads will have discretion to make most of the decision related to daily operations of their divisions. The level of autonomy found in this study shows that most divisional heads can hardly make decisions, even in areas related to divisions operations, without reference to head office. On the other hand head office keeps close control and supervision of the decisions made in divisions.

While most of the firms have been using divisionalised structure for more than ten years it was expected that divisions' management teams are capable of making major decisions in at least operating policies. Also where products are used as the basis for divisionalisation, top management at head office may not be familiar with some aspects of decisions to be made regarding different products handled by the divisions, hence grant substantial or full autonomy to division heads. This however is not the situation in practice.

The extent of autonomy granted to divisional heads has a direct influence on the objectives of performance measurement, the measures used and the problems faced in measuring performance. Increasing autonomy will result into changes in these aspects. The findings of the study show consistency between autonomy on one hand and objectives of performance measurement, the measures used, and the performance measurement

problems on the other. This consistency together with the fact that all the surveyed firms do measure their divisions' performance is an appreciation of the importance of measuring divisions' performance.

For effective use of divisonalized structure, firms need to push more decision making authority to the divisional heads. Emphasis need to be put on operating policy area which covers most of the decisions made in day to day operation. Giving more autonomy will improve decision making process as well as long term planning and strategy formulation. Divisional heads will also be in position to take up opportunities related to their operations without much delays. It has to be borne in mind that if autonomy is increased the currently used measures may fail to reflect the performance of the division as an economic entity and the managerial performance of the division's head. A firm may, therefore, need to change the measures used to reflect the change in autonomy.

5.3 LIMITATIONS OF THE STUDY.

This study has a number of limitations which need to be borne in mind when analyzing its significance.

1. The whole study was carried out in a three months time span with meagre resources. This made it difficult for a comprehensive pilot study to be carried out. It also affected the number of respondents since, not only that few questionnaires were distributed and collected but also some firms declined to respond citing time as a factor. As a result it was not possible to carry out detailed analysis,

for example, on the basis of the divisionalization bases used since each group did not have sufficient number of respondents.

2. The study focused on the extent of autonomy granted to "most" divisional heads in each individual firm. However, for various reasons, different levels of autonomy can be granted to different divisional heads in the same firm.
3. The study carries over some of the weaknesses inherent in using questionnaires for data collection purpose. Apart from the possibility of misinterpretation of items and definitions by respondents, answers to the questions may reflect, for example, how divisional performance "should" be measured and not how it is measured.

5.4. SUGGESTIONS FOR FURTHER RESEARCH.

This study, which was exploratory in nature, opens up a wide range of areas in management accounting which can be addressed. The following are some of the areas suggested for further research.

1. One of the question which is not answered in this study is why firms give low autonomy to division heads? A study in this area can also be approached on division to division basis.
2. This study linked the measures used with the existing body of knowledge. It is worthwhile to carry out a study on what are the main considerations in the choice of a measure in the surveyed firms.
3. The use of divisional total profit to measure performance

implies allocation of head office costs to divisions. How these costs are allocated together with definition of costs used to determine divisions profit can also be addressed through research.

4. It has been argued that case study approach is vastly superior to the general questionnaire based study. A case study can be undertaken by picking a large divisionalized company and carry out a comprehensive study on the aspects involved in this study

APPENDIX 1: APPENDICES RESPONDENTS.

Faculty of Commerce
P.O. Box 30197
Nairobi.

Dear Sir/Madame,

I am a Master of Business and Administration (MBA) student in the Faculty of Commerce, University of Nairobi. In partial fulfillment of the requirements for the MBA degree, I am undertaking a "Survey of Performance Measurement in Divisionalised Companies in Kenya".

In this survey a division is defined as a major segment of a firm that handles a specific product (or product line), process, customer group or covers specific geographical area, and may operate under different business name or as a branch of the parent firm.

Your firm has been selected to form part of this study. I therefore kindly request you to assist me by completing the attached questionnaire to the best of your knowledge. If you don't deal with a particular area in the questionnaire please pass it to the person in your firm who deals with the area.

The information requested is purely for academic purpose and will be treated with strict confidence.

If you have any additional information or comment please write it at the back of the last page.

Thank you for your cooperation.

B.W. MINJA
MBA II STUDENT

P. REIGN
SUPERVISOR,
LECTURER, DEPARTMENT OF
ACCOUNTING

APPENDIX 1: LETTER TO RESPONDENTS.

Faculty of Commerce
P.O. Box 30197
Nairobi.

Please answer the following questions by placing a tick (✓) in the space provided and/or giving details as may be necessary.

SECTION A: GENERAL

Dear Sir/Madame,

I am a Master of Business and Administration (MBA) student in the Faculty of Commerce, University of Nairobi. In partial fulfillment of the requirements for the MBA degree, I am undertaking a "Survey of Performance Measurement in Divisionalised Companies in Kenya".

In this survey a division is defined as a major segment of a firm that handles a specific product (or product line), process, customer group or covers specific geographical area, and may operate under different business name or as a branch of the parent firm.

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The information requested is purely for academic purpose and will be treated with strict confidence.

If you have any additional information or comment please write it at the back of the last page.

Thank you for your cooperation.

E.J. MINJA
MBA II STUDENT

P. KEIGE
SUPERVISOR,
LECTURER, DEPARTMENT OF
ACCOUNTING

APPENDIX 2

QUESTIONNAIRE

Please answer the following questions by placing a tick() in the space provided and/or giving details as may be necessary.

SECTION A: GENERAL

1. The industry of your firm:
Agriculture ()
Commercial and services ()
Finance and Investment ()
Industrial and allied ()
Other (Please specify) -----
2. Basis used for divisionalisation
Product ()
Geographical area ()
Customer ()
Process ()
Other (Please specify) -----
3. Time (in years) for which your firm has been using divisionalised structure -----
4. Total number of divisions -----

SECTION B: DIVISIONAL AUTONOMY

For each of the following policy and decision area, please indicate the extent of the autonomy granted to most divisional heads according to the following classification;

- NO - No discretion to divisional heads as they do not make the decision but carry out explicit head office instructions.
- LTD - Limited discretion to divisional heads subject to CLOSE supervision by head office who often refuses or modifies the proposed action.
- SBS - Substantial discretion to divisional heads subject to loose supervision and approval by head office who rarely reverse that decision.
- FULL - Full discretion to divisional heads without any reference to head office.

1. <u>Operating Policy</u>	Degree of Autonomy			
	NO	LTD	SBS	FULL
i) Determining range of products	()	()	()	()
ii) Determining technical characteristics of Products	()	()	()	()
iii) Determining quality of output	()	()	()	()
iv) Setting advertising and marketing policies	()	()	()	()
v) Determining selling prices	()	()	()	()
vii) Setting purchasing policy	()	()	()	()
vii) Appointing salaried staff (except divisional executives)	()	()	()	()
viii) Forecasting and interpreting economic conditions	()	()	()	()
ix) Carrying out major organizational changes within the division	()	()	()	()
x) Setting division's operational budget	()	()	()	()

2. <u>Financing Policy</u>	Degree of Autonomy			
	NO	LTD	SBS	FULL
i) Determining credit terms and cash discounts	()	()	()	()
ii) Selling and leasing divisional assets	()	()	()	()
iii) Arranging external short term borrowings	()	()	()	()
iv) Arranging external long-term loans	()	()	()	()
v) Determining remuneration policy for employees	()	()	()	()

3. <u>Investment Policy</u>	Degree of Autonomy			
	NO	LTD	SBS	FULL
i) Specifying amount of capital expenditure in annual budgets	()	()	()	()
ii) Choosing capital projects within capital expenditure limits	()	()	()	()

4. <u>Accounting and Internal Audit</u>	Degree of Autonomy			
	NO	LTD	SBS	FULL
i) Administering the divisional budget	()	()	()	()
ii) Determining methods of budgetary control	()	()	()	()
iii) Determining internal audit procedures	()	()	()	()
iv) Determining the form of reports prepared to show the state of divisional activities	()	()	()	()
v) Determining cost accounting methods	()	()	()	()

SECTION C PERFORMANCE MEASUREMENT

- Does your firm measure performance of its divisions ?
(Yes/No)
- If divisional performance is not measured what are the reasons?

- To what extent do you consider the following as divisional performance measurement objectives in your firm using the scale

- VI - very important objective
- I - important objective
- NI - not important objective
- NO - not in our objectives

	VI	I	NI	NO
Planning and strategy formulation	()	()	()	()
Investment decision	()	()	()	()
Control	()	()	()	()
Managerial performance	()	()	()	()
Managerial remuneration	()	()	()	()

Any other objectives (Please specify)-----

4. To what extent are the following performance measures used in measuring divisional performance in your firm?

	TGE	TRE	SH	AL	NAA
Sales in Quantity (units)	()	()	()	()	()
Sales in shillings	()	()	()	()	()
Contribution margin	()	()	()	()	()
Divisional total profit	()	()	()	()	()
Divisional controllable profit	()	()	()	()	()
Residual income (after charging interest on investment)	()	()	()	()	()
Return on investment	()	()	()	()	()
Meeting targets set in budgets	()	()	()	()	()
New products developed	()	()	()	()	()
Share of market	()	()	()	()	()
Employee turnover	()	()	()	()	()

Other measures (Please specify)-----

5. How often do divisions report to head office ?.

Once a year	()
Six monthly	()
Quarterly	()
Monthly or less	()

THANK YOU FOR YOUR COOPERATION

6. To what extent are the following considered as divisional performance measurement problems in your firm ?.

- | | TGE | TRE | SH | AL | NAA |
|--|-----|-----|-----|-----|-----|
| i) Difficulties in separating a division from the rest of the firm | () | () | () | () | () |
| ii) Problems of transfer pricing due to interdependence of divisions | () | () | () | () | () |
| iii) Difficultly in defining and measuring division's investment | () | () | () | () | () |
| iv) Difficulty in defining and measuring division's costs | () | () | () | () | () |
| revenues | () | () | () | () | () |
| v) Any other problems (Please specify)----- | | | | | |

Key To Abbreviations Used:

TRE - To a reasonable extent	TGE - To a great extent
NAA - Not at all	AL - A little
SH - Somehow	

Would your firm like to be acknowledged as a source of information for this study ?

(YES/NO)-----

If YES Name of the firm-----

THANK YOU FOR YOUR COOPERATION

Appendix 3

Testing for Independence of Level of Autonomy and Divisionalisation base

H_0 : Divisional Autonomy is independent of the basis for divisionalisation

H_1 : Divisional autonomy is not independent of the basis for divisionalisation

Selected level of significance $\alpha = 0.05$

Degrees of freedom $(5-1) (2-1) = 4$

$$X^2_{4,0.05} = 9.48773$$

Decision rule Reject H_0 if observed $X^2 > 9.48773$

Otherwise do not reject H_0 .

Observed $X^2 = 10.38$

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