

**AN ANALYSIS OF THE REVENUE
PRODUCTIVITY AND SOME ADMINISTRATIVE
FACTORS OF THE KENYAN TAX SYSTEM**

BY: WANG'OMBE D.K.

D61/7104/97



SUPERVISOR: MRS KITHINJI

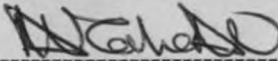
LECTURER, DEPT. OF ACCOUNTING

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENT FOR THE DEGREE OF MASTER OF BUSINESS
AND ADMINISTRATION (MBA) OF THE UNIVERSITY OF NAIROBI.**

DATE: 15TH NOVEMBER 1999


DECLARATION

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

SIGNED  DATE 15/11/99

WANG'OMBE D.K

This management project has been submitted for examination with my approval as the University Supervisor.

Signed  DATE 24/11/99

MRS. A. KITHINJI
LECTURER
DEPARTMENT OF ACCOUNTING
FACULTY OF COMMERCE
UNIVERSITY OF NAIROBI

DEDICATION

To my dear parents:

Justus Wang'ombe Karungu and

Charity Murugi Wang'ombe.

You are the best a child could ever have.

ACKNOWLEDGEMENTS

My sincere thanks go to several people who I owe for their contribution both directly and indirectly to the completion of my MBA Course

First my sincere gratitude goes to the University of Nairobi for granting me a chance and scholarship to study this course.

Secondly, I must express special gratitude to my supervisor Mrs. A. Kithinji, Lecturer, Department of Accounting for her unparalleled patience and support throughout this project. I am also grateful to the employees of the various organizations that supplied the relevant data for this study.

Special thanks go to Fr. Tom Macdonald for his spiritual guidance.

I cannot fail to thank Elizabeth, Emma and Susan who spent their time typing and proofreading this project.

Further, I would like to thank my fellow Masters of Business Administration (MBA) students for their encouragement and wonderful time-shared together.

Finally, but not least, to all my dear friends and relatives who wished me well during the course, to them all I say, thank you very much;

TABLE OF CONTENTS

	PAGE
Declaration	i
Dedication	ii
Acknowledgement	iii
Table of Contents	iv
List Of Tables	vi
List of Diagrams	Viii
Abstract	ix
Overview of the Project Report	xi
CHAPTER 1	
1.0 INTRODUCTION	1
1.1 Meaning of Tax	1
1.2 Purpose of Tax	1
1.3 Background of the Study	2
1.4 Statement of the Problem	5
1.5 Objectives of the Study	8
1.6 Importance of the Study	8
CHAPTER 2	
2.0 LITERATURE REVIEW	9
2.1 Measuring tax Productivity	9
2.2 Definition of Elasticity	10
2.3 Estimation of Elasticity	13
2.4 Methods of adjusting for discretionary Effects	15
2.5 Tax non-compliance	20
2.6 The explanation of tax Evasion	21
2.7 Aspect of national attitude towards Tax	23
2.8 Issues of tax administration in less developed Countries	24
CHAPTER 3	
3.1 RESEARCH DESIGN	26
3.2 Sources of Data	26
3.3 The population and Sample	26
3.4 Data Collection Method	27
3.5 Methodology of data Analysis	27
CHAPTER 4	
4.0 DATA ANALYSIS AND FINDINGS	32
4.1.0 Buoyancy and Elasticity	32
4.1.1. Buoyancy Estimates	32
4.1.2. Overall Buoyancy	33
4.1.3. Individual taxes Buoyancy	34
4.1.4. Buoyancy for 1995-1998	37
4.1.5. Elasticity of the tax System	39
4.1.6. Overall Elasticity	40

4.1.7.	Elasticity of individual Taxes	41
4.1.8.	Elasticity for 1995-1998	43
4.1.9.	Summary and conclusion Part I	44
4.1.10.	Summary of findings Part 1	45
4.2.0	ANALYSIS OF TAX ADMINISTRATIVE FACTORS	46
4.2.1.	Introduction	46
4.2.2.	Locating Taxpayer	46
4.2.3.	Taxpayer Compliance	50
4.2.4.	Check on taxpayer Compliance	53
4.2.5.	Resolution of controversies	56
4.2.6.	Tax Collection	59
4.2.7.	Penalties	61
4.2.8.	Policies on Employment	62
4.2.9.	Summary and conclusions Part II	63
4.3.0	TAXPAYERS ATTITUDE	64
4.3.1.	Introduction	
4.3.2.	Descriptive statistics on taxpayers Attitude	65
4.3.3.	Attitude and type of Organisation	67
4.3.4.	Size and Attitude	70
4.3.5.	Specific attitude Variables	72
4.3.6.	Factor Analysis	92
4.3.7.	Analysis of attitude towards individual Taxes	98
4.3.8.	Factor analysis for individual Taxes	105
4.3.9.	Summary and Conclusions part III	123
 CHAPTER 5		
5.0	DISCUSSIONS & CONCLUSIONS	125
5.1.	Introduction	125
5.2.	Summary and conclusions	125
5.3.	Limitation of the Study	129
5.4.	Suggestion for further Study	130
 APPENDIX		
1	Letter to Commissioner General KRA	131
2	Letter to Taxpayers	132
3	Taxpayers Questionnaire	133
4	Tax Administrator Questionnaire	140
5	Budget Tax Revenue Changes	154
6	Actual Tax Revenue	156
7	Tax Revenue Adjusted for Discretionary Changes	156
8	Bibliography	157

LIST OF TABLES

		Page
Table 4.1.1	Buoyancy Estimates	32
Table 4.1.2	Buoyancy for 1995 -1998	37
Table 4.1.3	Elasticity Coefficient	39
Table 4.1.4	Difference between Buoyancy and Elasticity	40
Table 4.1.5	Elasticity for 1995 - 1998	43
Table 4.2.1.	Failures to return	55
Table 4.2.2.	Delinquent income Taxes	59
Table 4.3.1.	General tax attitude score	66
Table 4.3.2.	Agricultural Sector Score	67
Table 4.3.3	Commercial and allied sector Scores	68
Table 4.3.4.	Financial and Investment Sector Scores	69
Table 4.3.5	Industrial Sector Scores	69
Table 4.3.6	Size by number of workers and Attitude scores	70
Table 4.3.7.	Size by turnover and Attitude scores	71
Table 4.3.8.	Size by shareholder equity and attitude score	71
Table 4.3.9.	Specific attitude variables' Descriptive Statistics	72
Table 4.3.10	Variable 1 scores Frequency distribution	73
Table 4.3.11.	Variable 2 Scores Frequency Distribution	74
Table 4.3.12.	Variable 3 Scores Frequency Distribution	75
Table 4.3.13	Variable 4 Scores Frequency Distribution	76
Table 4.3.14	Variable 5 Scores Frequency Distribution	77
Table 4.3.15	Variable 6 Scores Frequency Distribution	78
Table 4.3.16	Variable 7 Scores Frequency Distribution	79
Table 4.3.17	Variable 8 Scores Frequency Distribution	79
Table 4.3.18	Variable 9 Scores Frequency Distribution	80
Table 4.3.19	Variable 10 Scores Frequency Distribution	81
Table 4.3.20	Variable 11 Scores Frequency Distribution	82

Table 4.3.21	Variable 12 Scores Frequency Distribution	83
Table 4.3.22	Variable 13 Scores Frequency Distribution	84
Table 4.3.23.	Variable 14 Scores Frequency Distribution	85
Table 4.3.24.	Variable 15 Scores Frequency Distribution	86
Table 4.3.25.	Variable 16 Scores Frequency Distribution	87
Table 4.3.26.	Variable 17 Scores Frequency Distribution	88
Table 4.3.27	Variable 18 Scores Frequency Distribution	89
Table 4.3.28.	Variable 19 Scores Frequency Distribution	90
Table 4.3.29.	Variable 20 Scores Frequency Distribution	91
Table 4.3.30.	Eigen Values for General Tax system	93
Table 4.3.31	Component Score Coefficient Matrix for General Tax System	94
Table 4.3.32.	Factors affecting attitude on General tax system	95
Table 4.3.33.	Mode Scores on attitude towards specific taxes	98
Table 4.3.34	Average Scores on Individual Taxes	99
Table 4.3.35.	Eigen values for Corporation Tax	105
Table 4.3.36.	Corporate tax component score matrix	107
Table 4.3.37.	Factors affecting attitude towards Corporate tax	108
Table 4.3.38.	Eigen values for withholding taxes	109
Table 4.3.39.	withholding tax component score matrix	110
Table 4.3.40.	Factors affecting attitude towards Withholding tax	111
Table 4.3.41.	Eigen values for value added tax	112
Table 4.3.42.	Value Added Tax component score matrix	113
Table 4.3.43.	Factors affecting attitude towards V.A.T	114
Table 4.3.44.	Factors affecting attitude towards Custom Duty	115
Table 4.3.45.	Eigen values for Custom Duty	116
Table 4.3.46.	Custom Duty component score matrix	117
Table 4.3.47.	Eigen values for Excise duty	120
Table 4.3.48.	Excise Duty component score matrix	121
Table 4.3.49.	Factors affecting attitude towards Excise Duty	122

LIST OF DIAGRAMS

4.3.1.	General Tax System Factor Extraction by Scree Plot	92
4.3.2.	Corporate Tax Factor Extraction by Scree Plot	106
4.3.3.	Withholding Tax Factor Extraction by Scree Plot	110
4.3.4.	Value Added Tax factor Extraction by Scree Plot	113
4.3.5.	Custom Duty Factor Extraction by Scree Plot	117
4.3.6.	Excise Duty Factor Extraction by Scree Plot	120

ABSTRACT

This study evaluates the Revenue Productivity of the tax system in Kenya and some factors affecting such productivity. The productivity is measured through Buoyancy and elasticity. The coefficients are measured through log regression of the taxes to the Gross Domestic Product. The period of the study is 1989-1998. The adjustment for discretionary effects is made using the proportional adjustment method.

The analysis shows that there has been considerable improvement of the tax revenue productivity and that the reforms made in this period had significant effect on the responsiveness of the tax system. The Buoyancy coefficient for the overall tax system is 1.27 while elasticity was 1.26. The tax system therefore, responded adequately to the changes in National Income. All the taxes except VAT had responsiveness greater than unity. Excise duty had the highest buoyancy and elasticity coefficients. Introduction of VAT to replace sales tax has not yet improved the tax system productivity thus there is a need to improve performance of VAT.

The other objective of the study was to evaluate the factors affecting tax productivity. This study revealed that there is need to improve on the following: -

- 1) Locating taxpayer through registration.
- 2) Check on taxpayer compliance.
- 3) Resolution of controversies between taxpayer and tax officers.
- 4) Improve collection of taxes.
- 5) Penalties Application.
- 6) Policies on employment.

Kenya Revenue Authority has already started these measures. However, Kenya Revenue Authority requires time and resources to exact some impact on the tax system.

The taxpayers attitude survey showed that generally there is a negative attitude towards the tax system. This attitude is not confined to one sector or a certain size but cuts across all areas.

The factors affecting the attitude were identified to include:

- 1) Fairness of the tax system
- 2) Application of controls
- 3) Information provision
- 4) Use to which tax Revenue is put
- 5) Efficiency of tax administration
- 6) Cost of the tax system to taxpayer
- 7) Convenience

This provides areas that the tax authority should correct to improve the image it has to taxpayers. With the steps taken by Kenya Revenue Authority it will be a matter of time and resources to change this taxpayer image. In addition to measures taken, Kenya Revenue Authority must embark on promotional activities to sensitize society on tax issues and most important, it must be accorded political autonomy to make it effective.

OVERVIEW OF THE PROJECT REPORT

The research project has five chapters:

Chapter one is the introduction, which covers the definition, the background, statement of the problem, objective of the study and the importance of the study.

Chapter two, the literature review, provides a review of the literature pertaining to the subject matter of this project. The literature review covers the purpose of tax, measuring tax revenue productivity, tax non-compliance, explanation of tax evasion and issues of tax administration in less developed countries.

Chapter three the research design specifies the primary data, population of interest, sources of secondary data and methodology of analysis. Data findings and analysis is provided in chapter four.

Chapter five provides the summary of findings, discussions and conclusions, limitation of the study and recommendation for further research.

CHAPTER I

1.0 INTRODUCTION

1.1. MEANING OF TAX

Sommerfold et al(1980) defines tax as:

"A tax is any non penal yet compulsory transfer of resources from private to the public sector, levied on the basis of a predetermined criteria and without reference to a specific benefits received, in order to accomplish some of a nations economic and social objectives".

A tax is a non penal transfer of resources because it is not devised solely to prevent a person from engaging in some specific act deemed detrimental to society unlike fine. It is a withdrawal from the circular flow of income; from the private sector to the public sector. It is a transfer payment in that it is made without reference to a specific benefit received from the government as a quid-pro-quo.

1.2 PURPOSE FOR TAXATION

Tax is a major fiscal tool in which the government influences, directs and sometimes controls economic activities in a view to achieve desirable social and economic objectives. A particular tax may affect the economy in many ways and may be designed to serve a variety of purposes. These objectives are Allocative function, Distributive function and Stabilisation function (See Musgrave & Musgrave 1989),

1.3 BACKGROUND OF THE STUDY

Donor Assistance and taxation were until recently the two means by which the government mobilised resources to facilitate economic development. The declining donor funds phenomenon of the 1980s and 1990s has made it quite pertinent for Developing Countries to look for other sources of Government revenue and one obvious source would be the tax revenue. Taxes have thus begun to play a more important role in funding government operations.

The most important motivation for Less Developed Countries (LDC's) tax reform is the need to raise more revenue (Kusi, 1998). It is necessary that there be a quantitative measure to evaluate success in stimulating public resources through tax policy. One such measure is the responsiveness of tax revenue structures to national income. This responsiveness is known as Productivity of a tax system. Traditionally the productivity of a tax system is measured using buoyancy and elasticity (Kusi, 1998). Buoyancy of a tax system refers to the responsiveness of tax revenue to changes in National income and to discretionary changes. Elasticity is the responsiveness of the tax revenue to changes in National Income adjusted for discretionary changes. Discretionary changes are the changes in the tax rates and rules governing the tax system. A high elasticity (that is a tax elasticity coefficient of more than unity) is particularly desirable since it allows growth in expenditure to be financed by raising tax revenue without recourse to the politically unpopular decision to raise tax rates (Mansfield, 1972).

In previous studies, the Kenya tax system has been found to be income inelastic with an elasticity of less than unity and buoyancy coefficient of slightly above one (See Ole; 1973 and Njoroge; 1993). A recent study by Mwanzia (1996) found the tax system to be non productive with an elasticity of less than unity and buoyancy coefficient of just above one. In this recent study elasticity measure uses divisia index approach as a proxy to discretionary tax measures. One would be curious to know whether the same conclusions would be arrived at using a different measure.

Faced with the problem of increasing tax revenue, most developing countries adopt measures to change tax policy. These measures include changes in tax rates and/or widening the tax base.

Tax performance may be increased by improving on tax administration and especially to achieve a high compliance rate. As Lewis, W.A. (as quoted in Taylor, M.C. 1970) observed, "The direct taxes of individuals (in Nigeria) can be doubled by better administration and reducing evasions, even without an increase in rate". Quite understandably a compliant tax payer would ask the question. Why should the government penalise honest tax payers by raising tax rates while so much revenue is lost through evasion?

To obtain more revenue, should the government rely on improving tax administration as Lewis notes or should it achieve additional revenue through tax policy changes? Any extent of tax evasion, coupled with tax revenue inelasticity, indicates some administrative weakness.

An analysis of some factors influencing administrative efficiency is very important especially in Kenya at this time of need to improve on tax revenue collection. One of the principle aim of this paper is to analyze some administrative factors that may require to be improved in Kenyas tax system so as to increase tax revenue collection.

Kusi (1998) argues that a common feature of the tax structure of most developing countries is that they are complex (difficult to administer and comply), inelastic (non responsive to growth and discretionary policy measures) , inefficient (raise little revenue but introduce serious economic distortions), inequitable (treat individuals and business in similar circumstances differently), and unfair (tax administration and enforcement are selective and skewed in favour of those with the resources to defeat the system). The success of a tax system will largely depend on the co-operation with the tax-payer. The co-operation is hampered by the administrative aspects such as uncertainty and inconvenience as well as the taxpayers attitude towards the tax system. Nzioki (1994) observed that tax literature only serves the purposes of lawyers, accountants and students without consideration of tax payers. Nzioki further argues that tax laws are such that the Commissioner has no legal obligation to inform the taxpayer what he is required to do regarding his tax affairs. He further notes that once in a while and out of courtesy, the commissioner conveys scanty information through the public media and the press such as the date when the final returns or the instalment payments are due.

An analysis of the attitude of tax payers towards the tax system and aspects of tax administrations in Kenya is an area that requires attention. While tax administration is affected by these national attitudes, it is equally true that attitudes can in turn be affected by tax administration (Surrey S.S 1958). Surrey further observes that if tax administration has brought stability and honesty to its own operations, the self respect thus achieved can form the foundation for its demand of respect and compliance from tax payers. These aspects of tax administration and taxpayers attitude towards tax system in Kenya have largely been ignored by researchers.

1.5 STATEMENT OF THE PROBLEM

The importance of tax revenue collection and administrative efficiency cannot be overemphasised. Revenue criteria is usually the dominant consideration since governments of less developed countries (LDC) have become increasingly aware of the active role which budgetary measures can play not only in initiating growth but also in maintaining political power (Gobin, 1980). Gobin notes that not only are higher revenue levels needed, but tax yields should also be increased at a faster rate than income if infrastructure investments and social welfare expenditures are to be finalised without generating unacceptable inflationary pressures and/or increasing reliance on foreign assistance. Less developed countries have in recent times found it difficult to obtain foreign aid necessitating a review of their tax system to increase tax revenue.

The tax effort measured as Tax revenue to Gross domestic product in Kenya have in the last ten years (1988-1998) been significantly high averaging over 22% which is right over the average for 32 African countries (which has been about 17% see appendix 6). Kenyas public debt both domestic and external debt has been above 50% of GDP . The debt indicates a very heavy burden which if not Written-off the country will find it difficult to finance it let alone acquire new debt.

Budget deficit on the other hand has averaged more than 4 % of the GDP for the last five years. There is therefore a need to generate more resources to meet government expenditure. Domestic borrowing has risen from 60 billion shillings in 1992 to 150 billion shillings in 1998 .As result interest payment on government debt have risen to nearly 30% of total government debt (The Point; 1998). The implication here is that domestic borrowing is no longer an appropriate means for financing government expenditure.

Reduction in expenditure which is one option for the government to take in order to reduce the budget deficit is not easy to implement since it negatively affects the general welfare of its citizens. Since citizens have the power to vote a government in or out of power, expenditure reduction becomes increasingly difficult. Point (1998) notes that with increased vigilance on the part of revenue collection bodies and co-operation from Kenyans, the country would be able to meet a good number of its obligations without constant borrowing.

Tax compliance or otherwise has to be related to the general feeling of each citizen viz-a-viz the state. One of the most important reasons for high tax evasion in India is considered that the tax payers are not conscious of their responsibility toward society and the society in which they are living (Jain, as quoted in Herschell, 1978).

Tax revenue collection may be increased by improving on tax administration and especially to achieve a high compliance rate. To improve on tax collection the course in many countries may be first to strengthen the existing administrative machinery and then when this has been accomplished to face the basic issues of tax reform (Surrey, S.S. 1964).

Taylor M.C. (1970) argues that LDC's usually search for additional taxes and for new tax sources to increase revenue, yet it is true that the successful administration of some of the existing taxes would provide a considerable part of the needed additional revenue.

In Kenya, Point (1998) notes that the short term nature of the revenue collection often means that the Kenya Revenue Authority targets people who are already paying tax; Thus the focus is on the more established firms which are paying 99% of their taxes rather than the lesser known firms which are paying only one percent.

It is against the foregoing that a question arises: To what extent is the tax system in Kenya productive and what are some of the administrative factors that need attention so as to improve on tax revenue collection?

1.5 OBJECTIVES OF THE STUDY

- 1) Estimate the tax revenue productivity in Kenya.
- 2) Identify the attitude of tax payers towards the tax system in Kenya.
- 3) Identify some tax administration factors affecting revenue productivity in Kenya.

1.6 IMPORTANCE OF THE STUDY

The study will be of importance to:-

1) Tax Payers:

Tax payers would wish to see a tax system that is certain, convenient and economical. The study will reveal whether this is achieved.

2) Tax Authorities:

This study will identify some factors of tax administration factors that need attention of tax authorities for correction.

3) Tax Consultants:

This study will bring out a deeper understanding of the system of tax in Kenya and the problems faced by tax-payers. The study will help tax consultants solve taxpayers problems.

4) Academicians:

The study will provide an extension of knowledge of tax system in Kenya and provide a basis for more research.

CHAPTER II

LITERATURE REVIEW

2.1 MEASURING TAX PRODUCTIVITY

The encyclopedia observes that under revenue productivity, two requirements should be fulfilled.

1) PRINCIPLE OF ADEQUACY

A national tax system should guarantee revenues adequate to cover the expenditure of government at all levels. Given that public expenditures grow at least as fast as National Income, then tax Revenue as the main source of public expenditure should grow correspondingly.

2) PRINCIPLE OF ADAPTABILITY

A tax system should be flexible enough to produce additional revenue at a short notice (where this is necessary to cover unforeseen expenditures) - without causing economic disruption. The need may be to finance an emergency like war, famine, epidemic etc.

Revenue Productivity of a tax system is measured through its buoyancy and elasticity. Buoyancy is the sensitivity of tax yields to changes in national income. This sensitivity is measured in terms of elasticity or responsiveness of tax revenue to changes in Gross Domestic Product, i.e. income elasticity of tax yields is referred to as buoyancy. A buoyancy coefficient of more than one will indicate that revenue rises faster than income thus reducing chances of revenues lagging behind expenditure.

To measure buoyancy of an individual tax, a constant elasticity tax function used is

$$T_i = \alpha y^\beta$$

where

T_i = tax revenue from the i_{th} source

y = GDP at factor cost

β = Buoyancy coefficient

α = a constant

The equation is expressed as a double logarithmic function of the form.

$$\log T = \log \alpha + \beta \log y + E$$

where E = log normal, distributed error term.

2.2 DEFINITION OF ELASTICITY

Although the elasticity of tax revenue to income is often presented in aggregate models as a single number, it is more realistically visualised as the weighted average of the sum of the elasticities of separate taxes that often have widely divergent responses to changes in income (Mansfield, 1972). Thus the overall tax elasticity must be examined by studying the separate elasticities of the individual taxes. In turn, the income elasticity of each separate tax may be decomposed into two elements: the elasticity of the tax to the base and the elasticity of the base to income.

Symbolically, Mansfield (1972) has defined these elasticities as follows:

Elasticity of total tax revenue to income:

$$E_{T_t Y} = \frac{\Delta T_t}{\Delta Y} \cdot \frac{Y}{T_t}$$

Elasticity of kth individual tax to income:

$$E_{T_k Y} = \frac{\Delta T_k}{\Delta Y} \cdot \frac{Y}{T_k}$$

Elasticity of kth individual tax to base:

$$E_{T_k B_k} = \frac{\Delta T_k}{\Delta B_k} \cdot \frac{B_k}{T_k}$$

Elasticity of kth individual base to income:

$$E_{B_k Y} = \frac{\Delta B_k}{\Delta Y} \cdot \frac{Y}{B_k}$$

where

T_1 = total tax revenue

T^k = revenue from kth tax

Y = income (GDP)

B_k = base of kth tax

Δ = the discrete change in the variable associated with it.

It also permits identification of that part of revenue growth within the control of the government. On the one hand, the tax base constituent of elasticity may be raised by an improvement in administration. In this sense the tax-to-base constituent of elasticity is partly within the control of the government. On the other hand, the growth of the tax base lies outside the control of the government (apart from the influence of tax policy itself) and is largely determined by the way in which the structure of the economy changes with economic growth.

2.3 ESTIMATION OF ELASTICITY

Two methods, viz. the historical time series tax data (HTSTD) adjusted to discretionary tax measures (DTMs) and unadjusted HTSTD with time trends or dummy variables as proxies for DTMs, have traditionally been employed to estimate tax elasticities (Kusi, 1998).

The adjusted HTSTD approach attempts to eliminate discretionary tax changes (defined as the legal changes in the tax rates, tax bases, tax allowances and credits, and of tax administrative efficiency) from the HTSTD and the uses the adjusted HTSTD to estimate tax elasticity by the following single -equation model:

$$\log(T_1^*) = \log a + \log b_1 \log (B_1) + e_1$$

where

T^* = adjusted HTSTD to discretionary tax changes

B = tax base (or GDP in aggregate level)

e = disturbance term, and

b_1 = tax elasticity

This form of equation relating taxes and income is used in the study to obtain a measurement of elasticity. Such a form implies that the relation between receipts and income is approximated by the function:

$$T_1^* = aB^{b_1}$$

from which the double log function is derived. It contains an important assumption that the income elasticity is constant over the range of income considered. This constancy requires that the proportionate response of the tax to an income change of 1% will be the same, regardless of the level of income. No attempt has been made here to formulate more accurately the relationship between tax receipts and income by adding other independent variables to the estimating equation, such as lagged income, population, or proxy variable for the efficiency of the tax administration.

In adjusting the HTSTD to discretionary effects, the usual practice has been to use the Proportional Adjustment (PA) technique, the Constant Rate Structure (CRS) technique the Divisia Index Approach and the Dummy Variable Approach.

2.4 METHODS OF ADJUSTING FOR DISCRETIONARY EFFECTS

PROPORTIONAL ADJUSTMENT METHOD

This was originally developed by Prest(1962) and has since then been used by Mansfield (1972), Osoro (1993) (as quoted in Kusi,1998) and Njoroge (1993)(as quoted in Mwanzia (1996). The method starts with the estimation and separation of discretionary effects from the tax revenue. It is a two step process with preliminary yields being obtained by subtraction of the estimated yield from discretionary changes from the actual tax yield for that year as the first step and then refining these adjusted revenue series by a sequence of multiplicative factors. The effect of the multiplicative factors is to adjust tax yields to the tax structure of the rates and exemptions for the first year (which is also taken as the reference year). Each factor gives the proportion of total yield for that year which would have accrued automatically in the absence of discretionary changes. A series of the multiplicative factors when used on a series of revenues adjusted for discretionary changes will give a series of revenues based on the tax structure of the reference or base year.

The formula is given as:

$$T_{1,j} = T_{j-1} \times \frac{T_{j-2,j-1}}{T_{j-1}} \dots \frac{T_{2,3}}{T_3} \times \frac{T_{1,2}}{T_2}$$

Where $T_{1,j}$ = Actual yield in the jth year, $T_{i,j}$ = tax collections of the jth year adjusted to the structure of the ith year chosen as the reference or base year.

$T_{j-1,j} = T_j - D_j$, where D_j is the revenue effect of discretionary changes in the jth year.

The resulting series shows only the tax revenue which would have accrued without discretionary changes and this can now be applied on equation 2 above to give the elasticity. The value of β is the elasticity.

The proportional approach method is preferred in cases where full and reliable information of the discretionary tax revenue effects exist. The weakness with this method is its over reliance on budget estimates of the discretionary effects of the tax yield which tend to differ substantially from the actual taxes collected and more so in developing countries.

THE CONSTANT RATE STRUCTURE METHOD

This method was used by Choudry (1975) and Andersern (1973) (both quoted in Kusi, 1998). In this method, figures on actual tax receipts and data on the monetary value of the legal tax bases and their corresponding bases are collected. The tax bracket rates of the reference year are then multiplied by the corresponding base values and the products of each year are summed up.

Where there is no information on the legal tax brackets, effective tax rates of the reference year are used. This generates a series of revenue data based on the structure of the reference year.

The formula for the constant structure is derived as follows:

Let

$$T(t) = \sum_{i=1}^k T_i(t)$$

which is equal to the total tax revenue comprising yields from K categories of taxes in the period t, $T_i(t)$ = the base of the ith category of the taxes and r = reference year. The average effective tax rate for the categories in the reference year is given by:

$$t_i(r) = \frac{\hat{T}_i(r)}{x_i(r)}$$

So that

$$\hat{T}_i(t) = t_i(r) x_i(t)$$

is the simulated tax revenues of the ith category of taxes with respect to the reference year and

$$\hat{T}(t) = \sum_{i=1}^k \hat{T}_i(t) = \sum_{i=1}^k t_i(r) x_i(t)$$

The equation above gives the simulated total revenue at period t . The tax revenue so obtained is a linear combination of the tax bases and the coefficients of linearity are the effective tax rates for the given reference year. The elasticity is then obtained by regressing this simulated tax revenue with GDP.

The limitation of this method is that it requires highly desegregated data. The composition of tax bases keeps on changing thus placing a heavy demand on data availability. In most developing countries data on legal bases is often not available and the rate structure for the taxes is very complex. All the same the method is very simple to apply since it involves only multiplying tax bracket rates or effective tax rates of the reference year with the corresponding base values.

THE DUMMY VARIABLE APPROACH

This method uses a dummy variable as a proxy for discretionary tax measures. It involves the introduction of a dummy variable for each exogenous tax policy change. It was used by Khan (1973) and Artus (1974) (Both quoted in Kusi, 1998)

Revenue data is then fitted in the following model:

$$\text{Log}T = \beta_0 + \beta_1 \log Y + \beta_2 D_1$$

where the dummy variable D_1 takes the value 0 before the discretionary change and 1 after the change. In this model the coefficient β_1 gives the elasticity. The method is very simple to use since it does not require the adjustment of tax revenue (T) data. However, it is not very effective when discretionary changes have been so frequent in the past. Moreover it creates a potential multicollinearity problem from the inclusion of more

than one dummy variable into the tax function.

DIVISIA INDEX APPROACH

Like the Dummy variable approach this method introduces a proxy for discretionary tax measures. It was used by Choudry (1979) as quoted by Kusi (1998) and Mwanzia (1996).

The method is based on the divisia index approach used in the measurement of technical change. The effects of technical change in production are taken to be the same as the effects of discretionary changes in tax revenue yields. Discretionary changes cause increases in tax yield over and above those arising from automatic growth in the tax bases just like technical change causes changes in total productivity over and above those from the increase in factor inputs. The growth in revenue maps the upward movement along the tax yield curve caused by increases in the tax bases.

These movements can be represented by the elasticity of the tax yield because its an aggregate measure of automatic growth in revenue relative to the growth in bases.

Divisia index is equal to the percentage increase in total tax yield owing to the automatic increase in the tax bases. The index is derived from the aggregate tax function analogous to production function which must possess the invariance property, that is, if no discretionary measures exist and there is no discretionary revenue change and the growth in tax bases.

For this invariant property the necessary and sufficient conditions for the divisia index are:

a) Existence of a well defined continuously differentiable

aggregate function $f(x_1(t), \dots, x_n(t))$

b) The function (f) is homogenous of degree one.

The method uses time trends as proxies for discretionary changes and this is a major point of weakness in as much as it introduces some bias in the estimation of discretionary measures leading to either an over estimation or underestimation of the adjusted tax revenue. The problem with DIM is that the formula derived to estimate the tax elasticity is a line integral and in practical application, its discrete version is used causing bias in estimation of revenue impact of discretionary changes.

This method is good in that it provides estimates of the discretionary changes especially where the revenue effects of discretionary measures are not available.

2.5 TAX NON-COMPLIANCE

ASSESSMENT OF FACTORS AFFECTING NON-COMPLIANCE.

There are very many theories explaining causes of non-compliance. Strander and Fogliassio, (1989) examined three of the main factors causing non-compliance. This includes tax rates, complexity and system of controls. The tax rates argument is that the higher the rate the more incentive to under-report income. Simulations have been made to support the theory, finding that higher tax rates tend to stimulate tax evasion (Clot faller (1983) as quoted in strader and Foglassio(1989). Control system argument is that the less the control the higher the tax evasion. There are two types of controls: Preventive and punitive controls. Preventive controls includes withholding tax and use of third party information returns, while punitive controls are

such as tax returns audit, civil and criminal sanction. Tax Complexity explains the accidental non-compliance. It results from honest mistakes tax-payers make due to the complexity of the tax system such as tax laws, difficulty of keeping accurate books of accounts, inability to obtain information needed to comply and tax payer negligence, that is, lack of due care (American Bar association 1987 as quoted in strader & Foglassio 1989)

The extent of non-compliance of tax is difficult to measure. This is due to a number of reasons including, existence of underground - economy and lack of records of taxable activities. The existence of non-compliance can largely be deduced from the nature of tax structure control including the above mentioned issues i.e rates of tax, complexity and tax controls. It can also be deduced from the number of reported case of non-compliance. However this could strictly not tell the actual amount of non-compliance.

2.6 THE EXPLANATION OF TAX EVASION

Why do people evade tax?

The reasons are extremely varied, some authors stress economic factors, others psychological attitudes and still another group emphasises on administrative and legal determinants. Considering an individual tax payer one could think of him as maximising his expected taxes and penalties since pretax increase is given (Srinivasion 1973). In this case two important issues are apparent: the probability of the tax authorities to locate the tax evader and the amount of fines or the length of imprisonment imposed.

Among psychological elements reference has to be made to tax ethics which is the attitude of a group or of the majority of the people liable to pay taxes with regard to compliance or non compliance of their obligations which is related to the attitude vis-a-vis the state. As a whole tax, ethics seem to be different from the ethics prevailing in the fields. According to Schmolders (as quoted in Herschell 1978) who has developed these ideas extensively, tax ethics is related, besides the factors already mentioned to the subjective feeling of the tax burden and also to the sensation of being unfairly treated with regard to other tax payers. Tax evasion has to be related to the general feeling of each citizen viz-a-viz the state. One of the most important reasons for high tax evasion in India is considered that the tax payers are not conscious of their responsibility toward society and the society in which they are living (Jain, as quoted in Herschell 1978).

In the case of under developed countries the relative degree of administrative inefficiency is certainly an important factor in determining the existing situation. It cannot be denied that the amount of taxes to be paid and the services provided by government through its expenditure are also important elements which have some influence on the behaviour of the potential tax payer and, finally the burden which each tax payer feels he has to bear, considering its total as well as in relation to others. Furthermore the corruption which frequently exist within the government, the high propensity to consume and therefore to evade taxes and the productive structure (importance of small traders

and producers especially in the rural sector) have also been stressed (Patz : as quoted in Herschell, 1978).

2.7 ASPECT OF NATIONAL ATTITUDE TOWARDS TAX.

Tax administration does not operate in a vacuum. Its relationship at every turn are with the public, and since the combination of taxes reaches nearly every individual in one way or another, the administration finds itself dealing with the nation as a whole. Hence inevitably its operations and effectiveness are affected by the attitudes of the nation towards the system. The relationship between the citizens and the government affects the efficiency of the administration. Voluntary tax compliance varies from one country to the other. Similarly the national attitude towards a tax system differ. An understanding of the nature, extent and causes of these differences would be extremely helpful to the improvement of the existing situation. In many countries the task of tax administration is adversely affected, and seriously so, by the prevailing tolerance of the public toward non-compliance and avoidance. While tax administration is affected by these national attitudes, it is equally true that attitudes can in turn be affected by tax administration (Surrey, 1958). Surrey further observes that if tax administration has brought stability and honesty to its own operations, the self respect thus achieved can form the foundation for its demand of respect and compliance from tax payers. The tax administrator however cannot achieve this positive idea on his own. He requires the cooperation of all the people in the system.

Surrey concludes that:

"a tax administrator faced with the task of changing taxpayer attitudes should seek allies in those professions interested in the tax field. Primarily these are the legal and accounting professions, and the economists in the academic profession. All of these professional groups should interest themselves in the tax system and its administration. They should understand its operations and be able to criticize intelligently its activities, and they should aid in interpreting that system to the public....

.... These professional groups must realize that a significant share of the task of tax administration falls on them, and in these ways and many others they must aid the Government in its striving for effective administration".

2.8 ISSUES OF TAX ADMINISTRATION IN LESS DEVELOPED COUNTRIES

Surrey (1958) observed that in less developing countries emphasis is often made on reforms of the tax system to improve on tax revenue collection. The concentration on tax policy reforms that is on choice of tax rates an expansion of the tax base may lead to insufficient consideration of the aspects of tax administration. Surreys observations can be summarised in the following excerpt:

It is increasingly apparent, however, that tax administration must receive far greater attention if the goals of tax policy are to be attained. Much of tax policy is being directed to obtaining increased revenues to enable governments to carry out their economic planning. The search is for additional taxes, for new sources of revenue. Yet it is true in many countries that the successful administration of some of the existing taxes would provide a considerable part of the needed additional revenue...

...While many underdeveloped countries faced with dissatisfaction with their revenue systems are interested in making fundamental reforms, doing so may in some instances be putting the cart before the horse. Efforts to change the law may invoke sharp political and social struggles, whose effect might long delay any worthwhile changes...

.... The sensible course in many countries may therefore be first to strengthen the existing administrative machinery and then when this had been accomplished to face the basic

issues of tax reform.

Similar sentiments were expressed by Lent et al.(1973), and Taylor(1970). Kusi (1998) made similar conclusion when with respect to the tax administration in Ghana he stated," Despite the many changes that the tax reform have brought about, some problems of Institutional infrastructure of administration still exist". He singled out this aspects to be, locating taxpayers both in the formal and informal sector, ensuring compliance, audit and examination, computerisation of the tax authority records, application of penalties, publicise tax defaulters and use of an efficient and honest tax administration. Kusi summarises that, "Generally the tax administration need to improve their own managerial capacities through actions in the areas of collection management, audits and internal control, and personnel policy." Earlier such administrative factors had been observed by Surrey (1958) regarding the tax administration in developing countries. To strengthen the performance of a tax system, Surrey identified basic aspects that usually occur under nearly any tax.

These factors include:

- a) Locating the taxpayer through registration.
- b) Facilitating taxpayers compliance
- c) Check on taxpayers compliance: audit and examination.
- d) Resolution of controversies between taxpayer and tax officers.
- e) Collection of taxes.
- f) Application of tax penalties.
- g) Policy on employment of the revenue authority.

CHAPTER III

3.0 RESEARCH DESIGN

3.1 SOURCES OF DATA

Both secondary and primary data were used in this study.

Secondary data was used for the purpose of analysing the productivity of the tax system. The secondary data source was the economic surveys and statistical abstracts both publications of the Central Bureau of Statistics, Ministry of Planning and Economic Development.

Other important sources include Central Bank of Kenya quarterly and Annual Economic Reviews. Primary data was used with respect to the analysis of administrative factors and attitude of tax payers towards the tax system.

3.2 POPULATION AND SAMPLE

For the purpose of analysis of the taxpayers attitude, the population of interest in this study consists of all public companies listed at the stock exchange. The reason for choosing these companies is the fact that they are involved in paying nearly all taxes including income (corporate) tax, value added tax, custom and excise duty. These taxes form the greatest source of Government tax revenue. The quoted companies are also involved in withholding taxes with respect to Pay As You Earn (PAYE), tax on interest and on dividends. The opinion of the representative of these companies on the tax system therefore represents an opinion on a wide range of taxes. Given that there are only 54 companies listed in the Nairobi stock exchange, the number is too

small to warrant sampling.

3.4 DATA COLLECTION

Primary data was collected using questionnaires. Taxpayers attitude questionnaires, a sample of which is included in appendix 3, was administered by "drop and pick later method" to the finance managers/chief accountants of the companies listed at the Nairobi stock exchange. Administrative factors questionnaire, a sample of which is included in appendix 4, was self-administered to the Kenya Revenue Authority.

3.5 DATA ANALYSIS

REVENUE PRODUCTIVITY

Model specification

Revenue criterion was assessed through an analysis of the elasticity and buoyancy of the tax system, that is, sensitivity of tax yields to changes in national income including discretionary measures and to national income adjusted for discretionary measures. This sensitivity is measured in terms of elasticity or responsiveness of tax revenue to changes in Gross Domestic Product, that is income elasticity of tax yields referred to as buoyancy. A buoyancy coefficient of more than one indicates that revenue rises faster than National Income and discretionary measures combined thus reducing chances of revenues lagging behind expenditure.

To measure buoyancy of an individual tax, a constant elasticity tax function used is:

$$T_i = \alpha Y^\beta$$

where

T_i = Unadjusted tax revenue from the i_{th} source

Y = GDP at factor cost

β = Buoyancy coefficient

α = a constant

The GDP used for any year was the average of that year and the last years GDP. The purpose of averaging is that the GDP figures are figures for one calendar year while the tax figures are figures for one fiscal year which runs from 30th june of one year to 30th june of the next year.

The equation was expressed as a double logarithmic function of the form.

$$\log T = \log \alpha + \beta \log y + E$$

where

E = log normal, distributed error term.

Tax elasticity will be measured through use of proportional adjustment (PA) technique to adjust the tax revenue for discretionary measures. The double logarithmic function of the form below estimated the elasticity.

$$\log T^* = \log \alpha + \beta_1 \log Y + E$$

Where T^* is the adjusted tax Revenue

β_1 = Elasticity coefficient

An elasticity coefficient of more than one indicates that revenue rises faster than income thus reducing chances of revenues lagging behind expenditure. Correlation is measured through coefficient of correlation (R^2).

Each tax was individually regressed to GDP for both buoyancy and elasticity.

The period of study is the years 1988 to 1998. Within this period many changes has occurred to the tax system in Kenya including: Replacing the sales tax with the Value Added Tax, Introduction of the Tax Modernisation Program, Formation of the Kenya Revenue Authority to put tax administration under one bracket as well as many changes in tax rates and tax bases.

An analysis of the responsiveness of the tax system to national income since 1995 that is when KRA was formed is computed using arc elasticity as follows:

Beta is buoyancy coefficient for unadjusted tax revenue (T) to GDP (Y) and elasticity coefficient for adjusted tax revenue (T)

$$\beta = \frac{Y_1 - Y_0}{T_1 - T_0} * \frac{T_1 + T_0}{Y_1 + Y_0}$$

Similarly the Year to Year elasticity was analyzed by way of point responsiveness measured as follows:

$$B = \frac{Y_1 - Y_0}{T_1 - T_0} * \frac{T_0}{Y_0}$$

ANALYSIS OF ATTITUDE OF TAX-PAYER TOWARDS THE TAX SYSTEM

In this section of the research, data was analyzed using proportions, frequency tabulation and measures of averages. The analysis of total scores from all the respondents determined the attitude of tax payers to the tax system.

The analysis of total scores from all the respondents in a tax category determined the attitude of tax payers to that tax type. The results were used as independent check on the validity of the response given by Kenya Revenue Authority.

A factor analysis technique was used to determine the most important factors in influencing tax payers attitude.

Factor analysis involves a number of steps which include analysis of number of factors, determination of the variables in each factor and finally naming the factors based on the relationships of variables in that factor. The factor analysis was carried out using the computer statistical package for social scientists (SPSS) version 7.5.

ANALYSIS OF ADMINISTRATIVE CONTROL FACTORS

A Questionnaire was sent to the Commissioner General, Kenya Revenue Authority. This was meant to reveal some administrative factors affecting performance of the tax system.

The questionnaires sought to find out whether the following

factors have been put in place :

- a) Locating the tax payer through registration.
- b) Facilitating taxpayers compliance
- c) Check on taxpayers compliance: audit and examination.
- d) Resolution of controversies between taxpayer and tax officers.
- e) Collection of Taxes.
- f) Application of Tax penalties.
- g) Policy on employees.

Each element was analyzed based on the expectation of what a good tax administrative system entails.

CHAPTER 4

4.0 DATA ANALYSIS AND FINDINGS

4.1 BUOYANCY AND ELASTICITY

4.1.1 BUOYANCY ESTIMATES

The regression coefficients measuring buoyancy estimates for 1989 - 1998 and 1995 - 1998 are shown on table 1 and 2 respectively.

Table 4.1.1 Buoyancy Estimates for the period 1989-1998.

Overall Buoyancy				
TAX	BUOYANCY COEFFICIENT	% OF TOTAL 1989-98	R SQD	T-test
INCOME TAX	1.33	39.5	0.97	16.600
IMPORT DUTY	1.19	16.6	0.90	8.557
VAT/SALES	.715	21.5	0.91	8.93
EXCISE DUTY	1.89	20.3	0.98	20.1
OTHERS	.251	2.1	0.56	3.209
TOTAL TAX SYSTEM	1.26	100		

The regressions fits were excellent as measured by the R squared. Each tax type had a value over 0.9 except for other taxes, which reported a value of 0.56. The t-statistic was significant for almost all revenue sources for the desired level of confidence. The following is an analysis of each tax and overall tax buoyancy.

4.1.2 Overall Buoyancy.

One would hypothesis a-priori that for a developing economy like Kenya, the overall buoyancy coefficient is greater than unity. This is because, given the need for mobilising public resources during development, those countries that are experiencing growth are expected to exhibit a growth-elastic revenue base. The result for the ten years period 1989-1998 show that the revenue structure for Kenya has been able to keep pace with economic growth and that the overall buoyancy coefficient has been 1.26 (that is more than unity).

Compared to previous research results, there has been an improvement on tax productivity as shown by previous results by Njoroge (1993) where overall revenue buoyancy was 1.07 for the period 1981-1991. There has been a rise of about 0.19 in the level of buoyancy. Care must be taken before interpreting the effort on the part of revenue collection. The buoyancy measure includes both automatic response (elasticity) and response to discretionary measures. Some of the discretionary measure, which may have influenced responsiveness, includes:

- (i) The Government policy to reduce some tax rates so as to encourage production. Within this period corporate tax rate has been reduced from 42.5% in 1990 to 32.5% in 1998.
- (ii) The tax brackets on graduated tax rates has been widened by effectively reducing the tax rates.
- iii) Self-assessment programme was introduced in 1992.

- (iii) Custom Duty has been changed occasionally .
- (iv) V.A.T was introduced to replace the sales tax in 1990. Like custom duty VAT has also been reduced from a top 18% standard rate to 16% in 1998.
- (v) Excise duty rates had both up and down movement for different commodities.
- (vi) Tax administration.

The Government formed Kenya Revenue Authority to facilitate in the collection of taxes. KRA which became operational in 1995, is the umbrella body for all the tax departments. Some administrative factors influencing tax collection and attitude of taxpayers will be revealed from the results of administration and taxpayers attitude questionnaire shown at the second part of discussion and analysis.

4.1.3 INDIVIDUAL TAXES BOUYANCY

Income Tax reported high buoyancy over the period 1989 - 1998 at 1.33 . The regression fit was excellent at an R-squared of 0.97. The standard error of the buoyancy was low at 0.08 and the t-test was significant at 95% level of confidence. Income tax is potentially the most elastic source. It is therefore expected that Income Tax have a high rate of response to national income. The results of this study confirm the expectation. Income tax was found to be highly buoyant at 1.33 meaning that when national income increases, the income tax increases more than proportionately. This means that the tax systems succeed on two grounds.

- (i) The Revenue generated responds to the need to expand public expenditure.
- (ii) The tax succeeds as a built-in stabiliser where by Income tax response to change in national income automatically reduces the negative effects of inflation (or deflation).

The high responsiveness as mentioned above cannot be explained by one factor. Unless discretionary measures effect on taxes are removed from the tax collected one cannot point a particular factor to cause high responsiveness buoyancy. However it is evident that there has been good performance of the tax in generating desired revenue.

VALUE ADDED TAX

Value Added Tax was introduced in 1989/90 fiscal year. It was expected to boost overall revenue productivity. This research paper sought to evaluate the performance of the tax about 10 years since its introduction. V.A.T had a buoyancy coefficient of 0.715, which is far much lower than one. The t-test shows the coefficient to be significant at 95% level of confidence. The regression was good at an R squared of about 0.91. The standard error of coefficient was low at 0.14.

The Value added tax was introduced in 1990 to improve on revenue collection and administration replacing the Sales Tax. Far from the expectation, the VAT performance was the poorest as it was the only tax that had a buoyancy coefficient of less than one. Given the need to raise increasing revenue to finance expenditure in Kenya, V.A.T had a low performance in raising the overall tax productivity.

CUSTOM DUTY

Custom duty had similar performance to income tax. At a buoyancy coefficient of 1.19 the performance was impressive. The responsiveness was good enough to facilitate financing of public expenditure. The regression fit was good at an R-squared of 0.90 and standard errors of the buoyancy coefficient at 0.008. The t -statistic was significant at 95% degrees of confidence.

The level of buoyancy may be attributed to among others the liberalisation of the economy as required by the structural adjustment programmes, and tax administration vigilance on imported goods. The government intense in collecting more tax could be another reason.

EXCISE DUTY

Excise duty had the highest buoyancy rate at 1.89. The R squared was impressive showing a strong regression fit at 0.98. This was incidentally the highest R squared. The Standard errors of buoyancy coefficient was low at 0.03. The high buoyancy coupled with the fact that excise duty is the third major tax in terms of revenue contribution had a significant effect on the overall tax productivity. Though discretionary measures do influence the level of productivity of a tax, the tax had a unique performance almost doubling responsiveness to every change in National Income.

OTHER TAXES.

Other taxes include export duty, petroleum levy, road levy, licensing etc. These taxes are diverse and their imposition may often depend on the short term rather than long term objective. Incidentally they had the least buoyancy coefficient at 0.251. Moreover the regression was markedly poor at 0.56. This may be attributed to the factor mentioned above that their imposition is meant to serve a short run need, therefore they are less related to National Income but rather, the discretion of the Ministry of Finance.

4.1.4 THE BUOYANCY 1995-1998

This is the period within which KRA has been operational.

The period is too short to warrant a logarithmic regression. The Buoyancy coefficient was estimated by measuring the arc-elasticity whereas the year to year buoyancy was measured through the point elasticity. The buoyancy co-efficient is shown on Table 2.

Table 4.1.2

Buoyancy for 1995- 1998

	Income tax	Custom Duty	V.A.T	Excise duty	Others
Overall	0.677899147281	0.948682754996	0.914967588968	1.77995386889	0.866285263699
1995	1.03203404268	1.44855447224	-0.86629150779	4.15377643676	-0.61780721371
1996	0.694729629474	0.91523144875	1.04127184167	1.12036523071	1.02182101739
1997	0.042434233961	0.467079901224	0.355506725018	2.06025756256	0.059806820517
1998	1.35186552133	0.465499369248	0.276771816437	0	1.77738909783

The computed total tax buoyancy was 1.001 for the year's 1995/96 to 1998/99. This is slightly above one but more impressive given that it is expected that tax should at least change at the same rate as income change. However it is lower than the overall tax buoyancy for the period 1989-1998. Excise Duty had the highest buoyancy of 1.78 while income tax had the lowest at 0.68.

The low income tax buoyancy since 1995 will be attributed to many factors including the policy by the Government to reduce the income tax to encourage production. A possibility of low performance on the part of the administration cannot be ruled out.

V.A.T and custom duty had their buoyancy less than unity but at least above 90% at 0.91 and 0.94 respectively. Other taxes buoyancy was low at 0.87. For the period 1995/96 to 1997/98 there was a fall in buoyancy of income tax, custom duty and excise duty compared to the entire period 1989/90 -1998/99 whereas there was a significant rise in the buoyancy of VAT. There is a possibility that in the last 5 years VAT productivity has started to pick up especially due to improved administration since KRA was formed. However the poor performance may be a result of the transition that is more of a learning period that the KRA is experiencing.

On the overall basis, the total tax revenue buoyancy for the period 1995/96 - 1997/98 was lower than entire period 1989 - 1998 at 1.001 compared to 0.84. There is an implication that the KRA has not as yet improved the performance of tax collection. Care must however be taken in this analysis given that K.R.A. has been in operation for a very short period of time. She needs time to exact some significant influence on tax revenue performance for the country. Moreover the test used assumes linear relation between tax and national income which need not be the case. The year to year buoyancy did not reflect any amount of definite pattern for any of the taxes except for custom duty whose buoyancy was consistently decreasing from 1.44 to 0.47. The other taxes buoyancy had erratic movement whereby at times the buoyancy would be very high while other times it would be very low.

This kind of behaviour shows that there were erratic variables influencing the performance of the tax, which most likely would be the discretionary measures of the government. The behaviour of the custom duty is a reflection of the government policy to reduce tariff on imports in line with the liberalisation policy. It is noteworthy that this is the period that the country has experienced very high political and economic uncertainty brought about by the introduction of Multi-partyism and also decline of donor funds.

Similarly the climatic conditions including the El Nino and La-nina have adversely affected the agricultural sector which is the mainstay of the economy. The economy has in addition been struggling to contain inflation and stability of the shilling against the major currencies of the world.

4.1.5 ELASTICITY OF THE TAX SYSTEM

The regression coefficients measuring elasticity estimates for the period 1989-1998 is presented on tables 4.1.3. The percentage difference between buoyancy and elasticity is shown on table 4.1.4.

The elasticity coefficients since 1995 are shown on table 4.1.5. Like the buoyancy estimates, the regression fits were excellent as measured by R- squared. Each of the major taxes Income, custom duty, V.A.T and excise duty reported over 85% value of R-Squared. Other taxes had low fit at 56%. The t-statistic was significant for all the revenue.

TABLE 4.1.3 Elasticity Coefficients for the period 1989-1998:

Overall Elasticity				
TAX	ELASTICITY COEFFICIENT	% OF TOTAL 1989-98	R SQD	T-test
INCOME TAX	1.30	39.5	0.976	18.13
IMPORT DUTY	1.12	16.6	0.92	9.56
VAT/SALES	.73	21.5	0.91	8.861
EXCISE DUTY	2.14	20.3	0.96	14.347
OTHERS	-0.64	2.1	0.49	-2.79
TOTAL TAX SYSTEM	1.27	100		

TABLE 4.1.4

% DIFFERENCE BETWEEN BUOYANCY AND ELASTICITY for the period 1989-1998			
TAX	BUOYANCY COEFFICIENT	ELASTICITY	DIFFERENCE AS % OF BOUYANCY
INCOME TAX	1.33	1.30	2.25
CUSTOM DUTY	1.19	1.12	5.88
VAT/SALES	.72	.73	-1.38
EXCISE DUTY	1.89	2.14	13.23
OTHERS	.251	-0.64	154.9
TOTAL TAX SYSTEM	1.26	1.27	-0.793

The difference is computed as buoyancy less elasticity expressed as percentage of buoyancy.

4.1.6 OVERALL ELASTICITY

The estimated overall elasticity of tax revenues to income was substantially high at 1.27 brought about by the fact that the individual taxes elasticity were more than unity except for Value Added taxes and other taxes. Other taxes had the poorest performance with a negative elasticity of 0.6.

The comparison of overall buoyancy and elasticity shows a small difference. Studies have attributed difference between tax buoyancy and tax elasticity to the contribution of changes in the discretionary measures. However it is noteworthy that, the effect of discretionary measures cannot be completely captured through budget estimates as used in the proportional adjustment method.

As a result, the differences must in this study be interpreted with caution. The implication of this study is that discretionary measures did not have significant impact on the overall elasticity of the tax system. Previous studies have shown that in 1982-1991 total tax system had an elasticity coefficient of 0.88 (Njoroge 1993).

There is a considerable improvement given that the overall elasticity in 1989-1998 is 1.27, which is 44.3% higher than the elasticity of 0.88 reported in 1982 - 1991.

4.1.7 ELASTICITY OF INDIVIDUAL TAXES

INCOME TAX

Income tax reported a more than unity elasticity, which is significantly high at 1.30. This elasticity is less than its buoyancy by 2.25% points. The reason is that the government as reflected in the budget speech has in the 1990's considerably reduced tax rates for both corporate and graduated tax rate and also intensified on the tax collection. The objective has been to encourage work and production through lower tax rates. The self-assessment introduced in 1992 has also contributed to the success of tax productivity. Compared to previous periods the income tax reported a higher elasticity in 1989 - 1998. In 1982 - 1991 the tax elasticity was 1.07 (Njoroge 1993).

CUSTOM DUTY

Custom duty had a reasonably high elasticity of 1.07 implying that discretionary changes in custom duty were more than proportionately higher than changes in income. There was a considerable improvement in performance of the tax compared to 1982 - 1991 where the elasticity coefficient was 0.98. Compared to buoyancy the elasticity is lower by 5.88 percentage points. The discretionary measures had a significant impact on the tax production. The reason behind this is most likely the Government commitment to liberalise trade and intensify on tax collection.

VALUE ADDED TAX

V.A.T had the worst performance with an elasticity of 0.73. The implication is that an increase in income led to about one and half times increase in Value Added Tax. In terms of Revenue performance this is considerably negative. Compared to previous periods, the tax performance is excellent having increased from 0.73 (1982 - 1991) as shown in other research to 1.45 (1989 - 1998). This indicates that the introduction of Value Added Tax to replace sales tax in 1990 has not improved the performance of revenue production. Like elasticity the tax had the lowest buoyancy at 0.72. The difference between V.A.T elasticity and its buoyancy is 1.39% in favour of elasticity implying that the government had plans to reduce the tax burden. It is evident from reduction of standard rates from 18% in 1990 to 15% in 1999 that the intention was to reduce the burden to encourage production.

EXCISE DUTY.

The elasticity of excise duty was significantly high at 2.14. The buoyancy was much lower at 1.89. The difference may be attributed to the government policy that had effects of reducing the Excise duty rates and improve on tax collection. The high elasticity indicates a more than 2 times change in Excise duty with every change in National income.

OTHER TAXES.

The other taxes put together had a negative elasticity meaning that on average the other taxes were negatively related to income. The relationship is not very strong given that elasticity coefficient is only - 0.64. The linear fit was also not strong at R-squared of .57. The elasticity was many times less than the buoyancy implying that the government tax policies had a huge impact on the tax results. As observed in the case of buoyancy, the other taxes are diverse and their imposition may often depend on the short term rather than long-term objective

4.1.8 Elasticity since 1995

The elasticity coefficients for the period 1995-96 are shown on table 4.1.5

Table 4.1.5 Elasticity for 1995-1998

	Income Tax	Custom Duty	V.A.T	Excise Duty	Others
Overall	0.705316984244	1.27533424947	0.159891417455	1.68639618931	-2.26230263586
1995	1.0259612719	2.88525964728	-0.60873821033	5.21252728433	-0.355484135
1996	0.418452933752	0.986251193357	1.11287576853	1.00148271447	-2.98894988421
1997	-0.0013632324	0.478934721052	0.228820626876	1.90359805445	-3.5229602576
1998	1.3553934378	0.874073089122	0.106810531977	-0.32785311563	-0.51902748865

Excise Duty had the highest Elasticity of 1.69 while other taxes had lowest at -2.26. The performance of most taxes was still not appealing given that VAT had a coefficient as low as 0.16 while income tax had 0.7. The Custom and Excise duties had the best performance at 1.28 and 1.69 elasticity coefficients respectively. The low tax elasticity of the V.A.T can be attributed to the numerous changes made on the V.A.T system and the fact that it is a new system having been operated for only ten years. A possibility of low administrative efficiency cannot be ruled out.

The total tax system elasticity for the period 1995-98 was 0.93. The implication is that tax for this period had a low response to changes in National income. Indeed this is a situation that implies a high level of rigidity of the tax system. The buoyancy for the same period is a lot higher than the elasticity at 1.001 implying that much of the tax productivity has been a result of discretionary changes made by the government rather than automatic response of the tax system.

The year to year elasticity does not have a definite pattern with the highest being 5.2 for excise duty in 1995 and the lowest being - 3.5 for other taxes in 1997. Each tax type had an erratic behaviour of elasticity coefficient, sometimes high and other times low. For instance in 1995, excise duty reported a high elasticity of 5.2 but reported its lowest performance was -0.3 in 1998.

This behaviour could be attribute to the fact that during this period the government have had a tight budget resulting from inadequate foreign donor funds and therefore it had to result to taxation to raise revenue. The situation is such that in such instances the government embarks on short term revenue collection policies which depends on the needs of the time and therefore no definite pattern of responsiveness of tax to income.

4. 1.9. SUMMARY AND CONCLUSION PART 1

This part of the study set out to establish the revenue productivity of the tax system in Kenya for the period 1989/1998. At the outset the importance of revenue productivity especially for a developing country like Kenya was explained. Whereas it was reckoned that tax objectives are a question of trade-off due to their conflict, it is observed that the revenue productivity takes the most important role in shaping the direction of the tax system for a developing country.

The measurement of productivity through buoyancy and Elasticity was also outlined. The proportional adjustment method was employed to adjust for the discretionary measure effects in estimating the elasticity. The double logarithmic model was used to estimate elasticity and buoyancy coefficient for the ten-year period 1989/98. The coefficients for the period 1995-1998 were computed using the arc-elasticity method while the year to year elasticity was computed using the point elasticity method.

4.1.10 SUMMARY OF FINDINGS PART I.

The period 1989 to 1998 had overall buoyancy of 1.26 and an overall elasticity of 1.27. The tax system had a higher elasticity than buoyancy implying that the automatic response was higher than the response without adjustment for discretionary measures. The discretionary measures had an overall effect of reducing tax productivity. The buoyancy for the period 1995 to 1998 was 1.001 while the elasticity was 0.93. The discretionary measures in this period improved the tax productivity. The automatic response of tax to national income from 1995 to 1998 was too low suggesting a weakness in the tax system. However the buoyancy reported is on average an indication of improvement given that the whole periods 1989 to 1998 buoyancy is lower. High buoyancy is desirable to enable a country meet its budget.

For the period 1989 to 1998 the value-added tax had the lowest responsiveness both in buoyancy and elasticity. It thus did not improve on the overall productivity. The value-added tax was introduced in 1989/90 fiscal year. Compared to the period 1982 to 1991, the VAT had a same elasticity as the sales tax. The Excise duty had the best performance both in terms of elasticity and buoyancy. It had significant effects on improving tax productivity. A conclusion on the revenue productivity and especially factors affecting the productivity would at this point be premature before an analysis of some of the factors affecting such revenue productivity. The next chapter analyses some of the administrative factors affecting productivity.

4.2 ANALYSIS OF TAX ADMINISTRATIVE FACTORS

4.2.1 INTRODUCTION

The questionnaire sought to establish some administrative factors that are affecting the tax revenue productivity. In particular, six factors were expounded in the questionnaire. These includes:

- (1) Locating the tax payer through registration
- (2) Facilitating tax payer compliance
- (3) Checking on the tax payer compliance: audit and examination.
- (4) Resolution of controversy between taxpayers and the officers.
- (5) Collection of taxes.
- (6) Application of tax penalties.
- (7) Policies on employment.

For each of the factors, several questions were set in the questionnaire sent to Kenya Revenue Authority.

Each of the factors is analysed below.

4.2.2 Locating the taxpayer

This factor was captured in question 1 through 6: The question was to capture issues as follows:

<u>QUESTION</u>	<u>ISSUE</u>
1)	* Availability of tax payer's register
2)	* Completeness of the register
3)	* Reliability of the register
4)	* Efficiency of the register
5)	* Contents of the register
6)	* Validity and completeness of the register

The response to each issue implied that there exists a register of taxpayers for income, VAT and excise duty. The number of taxpayers registered was not given on grounds of confidentiality. If this was availed, comparison would have been made with other registers like association of trade register of companies and the like to establish completeness. In the absence of this, completeness is assessed through the response to the next part of the questionnaire. The register does not include all the taxpayers for some have not yet been captured by the KRA machinery. Some of these may be evading tax intentionally or otherwise. This implies that the register though put in place is not complete given that some person liable to tax have not been put in the record.

There is need therefore to carry out an intensive recruitment of taxpayer based on the cost benefit analysis to bring more people to the tax net.

The register is updated as need arises which could be as often as daily. Whereas this improves the register it is not full proof of reliability. The registration does not have a deliberate effort to update the register at regular intervals. The update is made only if need arises. The register is thus operating with incomplete coverage of the taxable areas. The register is computerised. In terms of efficiency of saving time, a computerised register is better than manual system. It is relatively efficient in accuracy of processing data and record keeping.

It however suffers from weaknesses of computerised information systems such as:

- 1) Technological changes and limitations like the millennium bug.
- 2) Data risk due to fraud and unintentional errors.
- 3) Cost of maintenance and training personnel.

This study did not however seek to evaluate the strength or weaknesses of the system. However it is noted here that subject to controls and checks put in place, the computerised system is a positive step taken by the KRA.

The contents of register reported include the name, personal identification number and the location of the taxpayer.

The response did not show any other records. It is important that beside the mentioned, the register should contain:

- (I) Expected taxable base (income sales or production) for control purposes.
- (ii) Business type and potential.
- (iii) Any fraud records especially tax fraud.
- (iv) Individual taxpayers, lifestyle and changes in such lifestyle especially home, social activities and marital status.
- v) Past years tax paid including under or overpayment.

Such information will help make an informed judgement on the taxable position of the subject and also locate the taxpayer. The validity and completeness must be intertwined.

This was captured in question 2 as well as question 6. The response shows that the comparison of register of taxpayers with other authoritative registers to ensure completeness has not been exhaustively carried out. It was observed that the tax authority started recruitment in the last fiscal year 1997/98 where upon the register of taxpayers is compared with such registers as:

- i) Registrar of Companies
- ii) Law society of Kenya
- iii) Medical Practitioners and Dentists Board.
- iv) Government suppliers
- v) Kenya Power and Lightning consumers register.
- vi) Electoral Commissions Register of voters

The recent step taken is a positive move towards the completeness and validity of the taxpayer register. The failure to do this in the past may explain the inadequacy of the register to capture all taxpayers, and subsequently show the low level of productivity.

It is hoped that this recruitment drive will move hand in hand with updating the register of taxpayers. Similarly other sectors of the economy such as the informal sector which in the past has been ignored should now put on registration through the same mechanism. The other registers, it must be noted, cannot serve as an adequate capture of all liable to tax but at least it would improve the reliability. The recruitment however must be made in a cost effective manner to ensure that important tasks are to select among the various sources, only those which promise to be productive or likely to be taxpayers under the tax in question, gather only so much information as can be efficiently processed, and devise an efficient system for connecting the selected information into a continuously current form usable for enforcement purposes.

4.2.3 INITIAL TAX PAYER COMPLIANCE

Having located taxpayer, the next step is to ensure initial and voluntary compliance. Unless the tax is withheld at a source, the tax payment will require filing of a tax return or deduction. This return provides the basic data for the assessment.

The question set to capture issue on taxpayer compliance were question 7 through to 24. The question sought to capture issues as follows:

Question	Issue
7 and 8	Training the taxpayers on tax matters
9,10, &11	Issue of tax return forms
12,13	Publicity on tax issues
14,15	Measures on tax policy abuse
16	Completeness of taxpayer returns received
17,18,19	Convenience of filling return forms
20,21	Assistance to taxpayers
23,24	Training to taxpayers

The factors are analysed as follows:

The revenue authority provides explanation of the tax matters to taxpayers through taxpayers education seminars. The objective is to provide simplification to the rather technical subject of tax especially to the lay people. The objective of this part of the survey is satisfied though a question arising is what extent do the taxpayers educating seminars meet the training needs and cover the wide range of taxpayers.

Similarly a second question is the response of the taxpayers towards this issue. This will be captured through response by taxpayers on the taxpayer attitude questionnaire. The tax returns form is issued to taxpayers through tax officers mailing and also local agents like accountants and auditors. The issuance is good given that the three media covers a wide spectrum. Income tax returns mailed to taxpayers are selected from previous years filed returns. This is rather backward looking rather than forward looking and therefore cannot capture new entries or those who had not paid tax in the past. Moreover the publicity made does not sensitise taxpayers that failure to receive return forms is no excuse for failure to pay tax, neither does it sensitise the taxpayers on the legal implications of tax evasion. The other matters publicised, as per the response is when to pay, any matters concerning tax charges. Such publicity is done through Radio, Newspapers, and Journals. The media for coverage is good in that it targets masses of people. However such media are expensive and require the recipients to be literate.

The possibility of tax policy abuse is anticipated. To address such abuse, the Revenue Authority has employed positive measures such as interest penalty, fine, imprisonment, impounding goods etc. Theoretically the system is strong in blocking tax policy abuse subject to the amount and extent of penalties. Literature has shown that tax evasion sometimes depends on control measures such as penalties involved.

The authority reckons that it does not receive returns from all taxpayers on register. This implies that besides the inadequacy of register in covering all tax areas, some of those on tax register are actually not paying tax. This shows high signs of evasion. The next question is what the tax authority does with the subjects that fail to file returns. This is dealt with in subsequent sections. The instructions on how to file returns are clearly written and they are adaptable to both hand written and printed form.

Some return forms instruction are however not met by taxpayers which include paying tax using the wrong tax return to pay a certain tax which is attributed to taxpayers ignorance.

The tax authority has put in place tax offices to assist taxpayers fill their returns. This is quite a welcome step in solving the tax payers problems.

However, it begs the question, how readily available are these officers to the taxpayers. This question would only be captured from the taxpayer attitude questionnaire. Filing tax returns is sometimes a problem to taxpayers. The revenue authority commissioned a research to taxpayers to find out some of these problems. It has been found that the taxpayers believe that the returns are

(1) Too technical and

(2) Have too many sections.

This implies that taxpayer require assistance to file them unless they are modified. The Kenya revenue authority has embarked on a taxpayer education programme to train tax payers on the issues mentioned above.

KRA is also planning to release a taxpayer charter detailing the rights and obligations of taxpayers. Such charter and taxpayers education is expected to improve on compliance but it is still early to comment on their value given that they have not taken root.

On the questions of training, it is further found out that there is no school education on tax.

Being a very vital subject, it should included at least at literacy level of education that is primary education to sensitise on need to pay tax and how to pay.

4.2.4 CHECK ON TAX PAYERS COMPLIANCE (AUDITS AND EXAMINATION)

There is no tax that can work effectively unless administrators maintain an aggressive attitude with respect to the taxpayer actions. Some taxpayers fail to file or make mistakes through ignorance or neglect while others will deliberately cheat. A passive attitude by the tax authority towards errors and fraud soon undermine the entire structure, because the diligent and honest taxpayers will almost in self defence be forced to the level of caress and dishonest. The check on taxpayer compliance issue was captured by questions 25 through to 35.

The questions sought to find out the following:

Questions	issues
25-26	Comparison with budgets Accuracy and competencies of returns and validity of tests made.
29	Value of in-depth analysis.
30-31	Completeness of returns
32-33	Problems faced in assessing taxpayers
34-35	Statutory investigations

The tax returns are not compared with budget neither are tax returns compared with deviations sampled. All the tax returns are sampled for an in-depth analysis. The sample is selected on a judgmental basis and is 3% of total returns. The fact that tax returns are sampled for in depth analysis is a good indicator of checks on completeness of data on such returns. It is also intended to be a deterrent on fraud by taxpayers because the knowledge that the returns are subjected to review by authority will deter people from making fraudulent presentations.

However despite the fact that sampling may reveal some weakness of returns it cannot tell about the many mistakes and frauds that they could be in the entire population. Moreover, if the taxpayers are not aware that such in depth analysis can be carried out they may play tricks with the system believing that the system cannot find out any such tricks.

The percentage subjected to in-depth analysis seems to be on the lower side. One may intentionally or otherwise play around with mathematics of probability and find out that the chances of put subjected to in depth analysis is only 3% which would not deter him from making fraudulent entries. The argument is that the risk of being noticed as fraudulent is very low that anyone may wish to take such risk. Moreover it is not evident whether the entire sample is really examined given that resources may not be available.

The choice of a sample by judgmental rules is better than the scientific approaches especially where the tax authority know a-priori area of high risk of default. In such cases a scientific approach like random, is not good because it might not capture areas of interest. However, judgmental sampling depends on the sincerity of the statistician and it cannot be proofed to be well intentional or otherwise. Others cannot verify it given that the discretion of selecting lies with the tax officer or statistician carrying out the sampling. Besides identifying the tax defaulters, in depth analysis should serve as a warning to would be or existing defaulters. The result of the tax collected after in-depth analysis revealed the additional taxable income obtained from the analysis with respect to income tax. No such data was available for both VAT and excise duty.

The number of income tax failure to return as revealed from comparison with the tax register was obtained for the years 1994 to 1997, the reasons were that, KRA officer had problems obtaining data on the matter for the years before 1993 and 1994 and that the self assessment policy stated in 1993.

There is a lag of about one year in presentation of data pertaining to returns due to the huge work involved. The percentage failures to return to those who returned are shown in the following table.

Table 4.2.1 percentage Return Failure

Year	% Failure to Return
1993/1994	119
1994/1995	164
1995/1996	172
1996/1997	221

This shows a very high rate of default, which should be addressed as a matter of urgency.

The tax authorities reckon that there have been problems in tax assessment and administration due to: 1) Poor records by taxpayers

2) Availability of qualified accountants and other personnel

3) Political influence of some taxpayers.

This was not ranked in the order of importance because Kenya Revenue Authority (KRA) has done no such ranking. In order to enhance compliance and to ensure payment, tax authority must improve on taxpayer awareness and assure political autonomy so as to curtail political influence of some people. The knowledge that some people due to their influence do not pay their dues will only encourage others to evade tax.

The KRA has the authority to obtain taxpayers information from other institutions like banks, insurance companies, and stockbrokers. However the value added by this power is highly cut down by the problems mentioned above especially political power. The findings revealed no record on taxpayers subjected to statutory investigations since 1989. It is worth noting that the use of anonymous bank accounts, inadequate record keeping and other institutional devices facilitate tax evasion and can only be determined through third party confirmations.

The lack of records is a deterrent to efficient tax administration but it cannot be an excuse for non-payment of tax. A refined method of determining an individual tax liability where there are adequate records, is the net-worth technique especially for income tax. The taxpayer net-worth at the end less at beginning of period determines taxable income. This net-worth method must be tailored to suit individual needs. Its effect is balanced by the time and skill, which it demands and hence it can only be used in the most difficult and important cases.

4.2.5 RESOLUTIONS OF CONTROVERSIES

The process of investigations will result in the taxpayer liability on the standpoint of the tax authority. The taxpayers would have filed their returns and sometimes may differ with tax authority. As a result a procedure for handling and resolving these controversies becomes necessary. Such system should furnish internal method of settlement within the administrative system and external method as judicial consideration. It is important that the taxpayer have complete confidence in the fairness and impartiality of the procedure as a whole.

The matters concerning resolutions of controversies between tax payers and the authority were captured by questions 36 to 40.

The questions sought answers as follows:

Question	Issues
36	Qualifications of members of tax tribunal
37	Specialised courts for taxes
39	Rate of backlog of cases.

The qualifications necessary to be a member of the tax tribunal are at least an 'O' level education and a businessman or professional of good reputation. There are no specialised tax courts in Kenya employed to deal specifically with tax matters. Similarly there are no specialised tax judges who concentrate on just but tax cases. The Kenya Revenue Authority has already recognised the problem and has made request to the Attorney General for specialised tax Judges and courts. This request at the point of writing the project had not been granted.

The system of solving controversies is therefore noticed to have weaknesses, which include:

- a) The check against arbitrary erroneous or unfair administrative actions is in first instance held by boards of local citizens [tribunal] and judicially that is not specialised.
- b) The number of backlog of cases was not provided on grounds of confidentiality. However, a question on the speed of processing tax cases is asked to taxpayers, which is a confirmation from taxpayers if there is any lag to holding tax cases. The study showed that the taxpayers have a negative attitude towards the speed with which tax cases are processed. Majority of the respondents believed that tax cases are not processed expeditiously.
- c) Lack of specialised tax courts and judges.

As a result of lack of specialisation and inadequate judicial personnel, tax cases are most likely settled by tax tribunals. A taxpayer cannot view the system to be fair if he is placed at mercy of a board of local citizens without adequate judicial check. Though it is argued in literature that panels of citizen boards prevent the taxpayers from being unfairly treated by arbitrary administrators, it is questionable whether this procedure is desirable. It might work best where the society has a long tradition of public duty and intelligent lay people's participation and where its purpose is to aid in ascertaining the facts. When a country is struggling to improve tax administration, it may not be advisable because at best it divides responsibility between tax office and local citizen such that each can blame one another for non-performance, at worst, it could lead itself to placing the tax payer at the mercy of local prejudices, placing tax administrators at the mercy of reciprocated favours and strengthening tendencies of social domination of some cliques to other people.

Tax cases delay works against the tax system. The delay on settlement cost both the government and the taxpayer. The government loses in terms of administrative costs, while taxpayers lose with respect to time value of money. On the other hand the government demands penalties of interest for delayed payment and especially for cases - cost on presentation to tribunal. Should the government lose, it is not obliged to compensate the taxpayer for time value of money lost. It would only be fair if the government through revenue authority corrects the position and repays interest on taxpayer money that it may wrongfully be holding. This may act as a remedy to delays and especially push the tax authorities to resolve differences expediently.

4.2.6 TAX COLLECTION

The goal of the tax procedure is the collections of tax.

The tax collection factor was meant to be captured from question 41 through 44.

The issues raised in each question are as follows:

QUESTION	ISSUE
41	Existence of tax delinquency
42	Demands on delinquent tax
43	Sanction on delinquency
44	Volume of tax defaulters

Literature has shown that the sure sign of ineffective tax administration is the presence of a very large delinquency in the payments, it indicates the lack of taxpayer respect for the tax system. This part of the questionnaire tried to come up with this analysis. However, it became difficult to analyse this because much of the data was not availed on grounds of confidentiality. Preliminary Survey showed that Kenya Revenue Authority is building up database for all this kind of information

In the case of income tax the amounts of delinquent tax in million of Kenya shillings is as follows:

Table 4.2.2 Delinquent income taxes

UPTO	AMOUNT IN KSH (MILLIONS)
1991	6759
1992	2386
1993	5501

UPTO AMOUNT IN KSH (MILLIONS)

1994	5054
1995	3525
1996	5609
1997	4216

There is a very huge amount of delinquent taxes indicating possible weakness in collection.

The amount for 1998 was not available due to lag in compilation whereas the figures for 1991 and previous years are cumulative. The amount of delinquent taxes is not classified. The amount of formal demands made was all the delinquent taxes but the classification of the tax collected on formal demand was not available. The fact that a step to make formal demand is good but at least the results of tax collected would have been more useful in making judgement on its efficiency.

The amounts of delinquent taxes are not classified for VAT and excise duty. The amount collected on formal demands made was not given in Ksh but an average percentage was given to be 10-20% of the formal demands made. This is a very low percentage, which may need further investigation at all.

There was no classification of number of delinquent taxes subjected to any sanctions.

This may be as a result of lack of data or simply no sanctioning of defaulters.

The classification of defaulters for VAT was not available for each year but an accumulated figure of 8000 taxpayers was given. This was 35% of total VAT taxpayers. The data on defaulters for each year were not available and therefore the intended analysis of change of defaulters over time could not be carried out.

Similarly, for income tax and excise and custom duty the classification of taxpayers subjected to sanctions was not availed as well as the number of tax defaulters.

The information was not availed on grounds of confidentiality. No proof could however be made of the existence or otherwise of records.

The objective of this part was to tell whether the tax authority is efficient in tax collection.

The existence of delinquent taxes is an indication of presence of weakness. Where delinquent taxes are not formally demanded, the tax system becomes like machinery that can only bark but not bite.

The analysis including discussion with tax officers indicated that formal demands are made.

However, just like it was earlier observed the success of such formal demands lies on the ability to provide efficient tax administration which is hampered by on such problem as political influence and corruption.

4.2.7 PENALTIES

The tax administrator must be equipped with a variety of effective penalties, which can wield intelligently and firmly. However, literature shows that it is at this point that a tax system is found to be wanting. The matters touching on penalties were meant to be captured from question 45. The question sought to know numbers of taxpayers subjected to penalties. The information was not availed on grounds of confidentiality. Thus the effectiveness of the penalties in relation to defaulters could not be analyzed. The factor, however, is well captured by the attitude questionnaire sent to taxpayers. At the end of the day, it is the taxpayer attitude towards the penalties system, which can tell whether they are effective. This is analyzed later in the chapter.

4.2.8 POLICIES ON EMPLOYMENT

The efficiency of the tax system will lie on the quality and quantity of its personnel. The quality depends on the training given and also motivation.

The issues that were meant to be captured by the questionnaire includes:

- 1) No of employees
- 2) Distribution of employees in terms of qualification
- 3) Distribution of employees in terms of income.

The information on this part of the questionnaire was not availed on grounds of confidentiality.

However, preliminary survey and discussions revealed the following:

- 1) Kenya Revenue Authority inherited the system of taxation as it was and is trying to make necessary changes on employment size and rewards. To this end, it has carried out a survey on its number of employees, their income and qualifications, their special training and duties and further training needs.

At the time of this analysis, the results were not yet released.

- 2) Kenya Revenue Authority employees remuneration has a two tier system with some workers paid at Kenya Revenue Authority rates (which are comparable to the private sector) while others are on public sector rates that are usually lower.

The second observation needs a special mention. The system will definitely create dissatisfaction unless corrected. This dissatisfaction may induce workers to seek for bribes and other unorthodox method especially where they feel there is unfair income earnings inequality amongst themselves.

4.2.9 SUMMARY AND CONCLUSION PART II

This part of the study sought to explain some of the factors affecting the tax system in Kenya.

The analysis was constrained by the fact that some of data intended for analysis was not availed on grounds of confidentiality or simply because it did not exist such as the ranking of the factors that affect application of tax administration to some taxpayers which KRA has never done. Some of general observations are that Kenya Revenue Authority took over the tax administration recently.

It has problems organising its operations and data due to the huge workload such issues involve.

Each of the factors that were analysed indicated a high chance of influencing the tax performance.

There is therefore a need for re-orientation and reorganisation of the entire tax system. Luckily

KRA seems to have observed this problem and it has taken steps to change the situation. Some of

the steps like: a) Taxpayers Education

b) Taxpayers charter

c) Taxpayer recruitment

d) Staff training and

e) Computerisation

are some of positive issues that are expected to yield good returns in the future.

However the period since these steps were taken is so short that no meaningful analysis could be

done. Most of these steps like a, b, and c, above have been started in the last fiscal year 1997/98

4.3.0 TAXPAYERS ATTITUDE.

4.3.1 INTRODUCTION

The taxpayers response was captured through a questionnaire sent to all the quoted companies in the Nairobi Stock Exchange.

There were 54 quoted companies distributed as follows:

Type of company	No of listed companies
Agriculture	13
Commercial and services	10
Finance and Investment	13
Industrial and Allied	<u>18</u>
	54

The response was obtained from 42 companies.

The other 12 companies did not respond to the questionnaire and therefore they were deemed to be dis-interested. The non -response companies were as follows:

Type of company	No of Non- Response
Agriculture	4
Commercial and Services	1
Finances and investment	2
Industrial and Allied	<u>5</u>
	12

The non-response could not have effect on the results in any significant way given that they represent a small percentage of the total. The objective of this part of the analysis includes:

- 1) Assess taxpayers attitude towards the tax system.
- 2) Establish whether there is a significant difference between response of different company types

and company size.

3) Establish some factors affecting taxpayers attitude.

The questionnaire was divided into 3 parts:

Part A; whose objective was to establish the general attitude of taxpayers and factors affecting the attitude towards the tax system generally.

Part B; whose objective was to classify the respondents into groups.

Part C; whose objective was to establish factors affecting the attitude towards the specific types of tax.

4.3.2 DESCRIPTIVE STATISTICS ON TAX PAYERS ATTITUDE

The tax payers attitude was measured by averaging the response to questions set on a scale 1-5 where:

1= very poor

2= poor

3= neutral

4= good

5= very good

This scale replaces the scale on questions set at same mapping as

Very poor = Strongly disagree

Poor = Moderately disagree

Neutral = Either agree nor disagree

Good = Moderately Agree

Very good = Moderately Disagree

To facilitate the mapping, negative questions scale was reversed such that what was agree become disagrees. There were only three negative questions i.e. Question 1, 11 and 16.

The observation was that taxpayers have a negative attitude towards the system with an average score of 2.4. This is a moderate disagreement about the aspect of the tax system that was included in the questionnaire. These Aspects touched on characteristics of a good tax system and where a poor score is given, it shows a negative attitude.

The distribution of the scores was as follows: -

4.3.1 General tax attitude score

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	254	30.2381	30.2381	30.2381
2	242	28.80952	28.80952	59.04762
3	150	17.85714	17.85714	76.90476
4	122	14.52381	14.52381	91.42857
5	72	8.571429	8.571429	100
Total	840	100	100	

Source: Primary Data

The mode score representing 30.1% of the total respondents held a negative attitude towards the tax system. The cumulative percentage frequencies shows that 59.1% were in either strong disagreement or moderate disagreement. A score less than neither agree nor disagree is deemed to be negative. A score of neither Agree nor Disagree is a middle-way, which is not favorable for a sensitive subject like tax. To achieve voluntary compliance, taxpayers should have a positive attitude towards the tax system.

4.3.3 Attitude and organization type.

This is an attempt to analyze the relationship between the size and type of organization and the attitude towards the tax system.

The organization type identified were

- i) Agricultural
- ii) Commercial and Allied
- iii) Finance and Investment
- iv) Industrial

Organizations size was defined in terms of:

- i) Number of employees
- ii) Shareholders equity
- iii) Level of turnover (income)

Agricultural sector

Table 4.3.2 Agriculture sector scores

	Frequency	Percent	Valid Percent	Cumulative Percent
1	55	27.5	27.5	27.5
2	69	34.5	34.5	62
3	35	17.5	17.5	79.5
4	28	14	14	93.5
5	13	6.5	6.5	100
Total	200	100	100	

Average score was 2.3. It indicates a negative attitude. There is no difference between attitude by the entire population and the agricultural sector given that the sector does not portray any special influence on attitude. The majority of respondents are in disagreement

about the issues raised in the questionnaire. There is a percentage of 62 in negative attitude while 17.5 are neutral. Only 20.5 are positive about the system.

Commercial and Services

Table 4.3.3 Commercial and services scores

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	58	32.222222	32.222222	32.222222
2	28	15.555556	15.555556	47.777778
3	40	22.222222	22.222222	70
4	34	18.888889	18.888889	88.888889
5	20	11.111111	11.111111	100
Total	180	100	100	

Source: Primary Data:

The average score given by this sector is 2.6.

On average, the commercial sector companies have a negative attitude towards the tax system.

The mode score representing 32.1 gave a score of 1 while 47.8% gave a score of 1 or 2. This shows that the majority of the taxpayers have a negative attitude. 29.9% have a positive attitude while 22.2% were neutral.

Financial and Investment

The average score was 2.4, an indication of negative attitude. 61.4% of the respondents in this group have expressed negative attitude towards the tax system. The mode representing 31.4% gave a score of 1. Only 2.4% had a positive attitude towards the system. 14.5% were neutral. Just like the other sectors, there is a negative attitude towards the system.

Table 4.3.4 Financial and Investment scores

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	69	31.363636	31.363636	31.363636
2	66	30	30	61.363636
3	32	14.545455	14.545455	75.909091
4	40	18.181818	18.181818	94.090909
5	13	5.9090909	5.9090909	100
Total	220	100	100	

Source: Primary Data

Industrial and Allied sector

Table 4.3.5 Industrial sector scores

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	72	27.692308	27.692308	27.692308
2	81	31.153846	31.153846	58.846154
3	45	17.307692	17.307692	76.153846
4	31	11.923077	11.923077	88.076923
5	31	11.923077	11.923077	100
	260	100	100	

Source: Primary Data:

Mode score was 31.1% .The mode represents 31.2% of the respondents. 58.8% gave a score of 1 or 2 indicating that majority in this sector had a negative attitude towards the tax system. Similarly on average, there is a negative attitude given that the mean score is 2.4. Once again, there is no significant difference between sector attitude and the general attitude towards the system

The above analysis shows that there was a negative attitude towards the system in all sectors selected and therefore no significant difference with the general attitude observed earlier on.

4.3.5 Size and attitude

Number of workers and attitude scores

Table 4.3.6 Size by number and attitude scores

PERCENTAGE

<u>No of workers</u>	<u>Average</u>	<u>Negative</u>	<u>Neutral</u>	<u>Positive</u>
0 - 100	2.27	65	18.8	16.2
101-500	2.34	64	12.0	24
501-1000	2.7	50.0	21.7	28.3
Over -1000	2.45	61.2	11.3	27.5

Source: Primary Data

The above statistics indicate that there is a negative attitude towards the tax system among all the taxpayers in the group. It can be seen that the majority of respondents in each of the cases gave scores that indicate negative attitude.

The average scores similarly were lower than neutral. There is therefore no significant difference among the companies categorized in terms of the size of workforce.

Turnover and attitude scores

Table 4.3.7 Size by turnover and attitude scores

<u>Turnover</u>	<u>Average</u>		<u>Negative</u>	<u>Neutral</u>
0 – 500	2.5	55	23.2	21.8
500 – 1000	2.5	55	18.2	26.8
1000 – 2000	2.2	67	12	21
2001 and over	2.6	58.5	14.5	27

Source: Primary Data:

The above results indicate that all the groups shown had an average score of less than 3.

The score is within the negative side. The majority of respondents in each case indicated a negative attitude towards the tax system. There is therefore no significant difference among the various sizes as measured by level of Turnover

Shareholders Equity and Attitude

Table 4.3.8 Size by Shareholders Equity and Attitude

<u>EQUITY AMOUNT IN</u> <u>MILLION Ksh.</u>	<u>PERCENTAGE</u>			
	<u>Average</u>	<u>Negative</u>	<u>Neutral</u>	<u>Positive</u>
0 – 1000	2.4	58	20.7	21.3
1000 – 2000	2.3	59.4	18.8	21.9
2001 – 5000	2.4	60	15.3	24.6
5001 – 10000	2.4	61.9	16.3	21.9
10,000 and over	2.7	50.9	18.2	30.1

Source: Primary Data:

The results as shown in the table above indicate that on average the respondents scores are less than 3. This implies a negative attitude. The majority of respondents had a negative attitude to the system. In each case, the proportions that held positive attitude is much lower than that which held positive attitude. This indicates that there is no significant difference of attitude among the various sizes measured by shareholders equity. In all the various classifications made, there is a negative attitude towards the system. Size and business type did not affect response and therefore attitude is similar for all the groups.

4.3.5 SPECIFIC ATTITUDE VARIABLES

This was measured on an aggregate of 20 questions based on the Smithian criterion of a good tax system. The summary score for the 20 questions in the first part of the questionnaire are as follows.

TABLE 4.3.9 specific attitude variables descriptive statistics

VARIABLES	Average	Std.dev	mode
1	3.3333333	1.2623375	4
2	3.7857143	1.297948	5
3	2.3809524	1.188407	2
4	2.0714286	0.9726217	2
5	1.8333333	1.166957	1
6	2.8571429	1.4068028	3
7	2.0952381	1.1220522	1
8	3.2380952	2.756894	2
9	2.5	1.2735585	2
10	2.0952381	1.2456661	1
11	3.3095238	1.1150434	3
12	1.952381	1.103263	1
13	2.9047619	1.3030831	4
14	2.2142857	1.3350019	1
15	2.3809524	1.1251532	2
16	4.5	1.0876244	5
17	2.8333333	1.2080354	4
18	2.6428571	1.122311	2
19	2.1666667	1.7931668	1
20	2.5952381	1.1906039	2

Each Variable is analysed below.

Variable 1

Tax affairs require the company to employ a person in charge of the tax matters.

Table4.3.10 Variable 1; Scores Frequency distribution

score	Frequency	Percent	Valid Percent	Cumulative Percent
1	5	11.90476	11.90476	11.90476
2	6	14.28571	14.28571	26.19048
3	9	21.42857	21.42857	47.61905
4	15	35.71429	35.71429	83.33333
5	7	16.66667	16.66667	100
Total	42	100	100	

The questions sought to know whether tax affairs are huge enough to warrant employment of a person specifically for the purpose. It is noteworthy that there is a possibility of mis-interpretation of the question. Whereas a company may not have an employee whose title is a tax officer, the accounting department is charged with that responsibility. In fact the respondent who was the Finance Director is the head of the Accounting department and therefore in charge of tax affairs!

Average the respondents neither agreed nor disagreed. The mean score was 3.3.

The mode representing 35.7% of the respondents was 4. The majority of respondents gave a score of 3 and above. 52.4% are in moderate or strong agreement. It implies that companies employ a person in charge of tax matters or at least a member of the accounting department will be in charge of the tax affairs.

Variable 2

Reasons for which Government imposes taxes are well known.

Table 4.3.11 Variable 2; Scores Frequency distribution

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	2	4.761905	4.761905	4.761905
2	8	19.04762	19.04762	23.80952
3	2	4.761905	4.761905	28.57143
4	14	33.33333	33.33333	61.90476
5	16	38.09524	38.09524	100
Total	42	100	100	
	42	100		

The question was set in such a way that it does not bias respondent to disagree but rather let him choose such disagreement if any. On average the variables score was 3.8. There is a high level of agreement that the reason behind taxation is clear. In another sense, far from what is ordinarily believed, taxpayers are positive about the need to be taxed. The majority representing 38.1% of respondents gave a score of 5 whereas 71.4% gave a score of moderate and strong agreement.

Generally respondents have full knowledge as at why taxes are imposed. However there are a few who were not aware indicating that some taxpayers need to be informed on purpose of taxation.

Variable 3

The uses to which government put tax revenue are well known.

Table 4.3.12 Variable 3; Scores Frequency distribution

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	12	28.57143	28.57143	28.57143
2	13	30.95238	30.95238	59.52381
3	7	16.66667	16.66667	76.19048
4	9	21.42857	21.42857	97.61905
5	1	2.380952	2.380952	100
Total	42	100	100	

Like Variable 2 above the question was set in a positive way to avoid Negative bias. It is important that taxpayers be aware of the use to which the government puts tax revenue. This is the certainty of evidence. On average the respondents gave a score of 2.4. The average score indicate a moderate disagreement with the statement. The mode score given by 31% of the respondents was 2. 59.5% were in moderate or strong disagreement.76.2% gave a score of 3 or less. The implication is that majority of the respondents were in disagreement that the use to which government put tax revenue is known. It is good to note that the respondent were a group of learned and well-exposed members of the society. In this regard it can be concluded that majority of taxpayers do not known how their tax is used by the government.

Variable 4

The uses to which the government puts revenue are beneficial to taxpayers.

Table 4.3.13 Variable 4; Scores Frequency distribution

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	13	30.95238	30.95238	30.95238
2	17	40.47619	40.47619	71.42857
3	9	21.42857	21.42857	92.85714
4	2	4.761905	4.761905	97.61905
5	1	2.380952	2.380952	100
Total	42	100	100	

The average score was 2.07. Indicating that on average there is a moderate disagreement on this issue. The deviation was very small at 0.97. Implying a high level of consensus. The majority of the respondents gave a score of moderate and strong disagreement. Taxpayers thus seem to disagree that they benefit from the use to which the government puts tax revenue. This issue is related to certainty of evidence. Where taxpayers are not certain that they benefit from the use of tax there is a high inclination to evade tax. The taxpayer feels that he will not benefit from the tax he pays, It is like he is being robbed by a being that has more muscle than he does. Such a feeling only encourages people to evade tax and use unorthodox methods like bribing to reduce their obligation.

Variable 5

All citizen pay their taxes

Table 4.3.14 Variable 5; Scores Frequency distribution

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	23	54.7619	54.7619	54.7619
2	8	19.04762	19.04762	73.80952
3	5	11.90476	11.90476	85.71429
4	5	11.90476	11.90476	97.61905
5	1	2.380952	2.380952	100
Total	42	100	100	

The factor sought to ascertain whether the respondent believes that all other taxpayers are making good their obligation or the tax burden only rests on a few compliant taxpayers.

It is not expected that one would know from statistics how many are not paying but from behaviour of his neighbours and the grapevine which would create an attitude on whether others are paying their dues.

Average score for the factor is 1.88, which is low in deed. The score indicates an absolute disagreement that others do pay their taxes. It shows that the taxpayers are suffering in silence while knowing that others are not paying. It also shows how dissatisfied they are with the tax system. Where taxpayers believe others are not paying their taxes, there is an inclination to evade tax or to bribe away so as to reduce tax burden. The majority being 54.8% of the respondents gave a score of one (strongly disagree). 73.8% were in either moderate or strong disagreement while 85.7% gave a score of 3 or less.

It is clear that the majority of the taxpayers are not happy with the fact that there are only a few of them carrying the burden of government expenditure while other people do not pay taxes. When coupled with factor 4 and 3 there is an indication that the inclination to evade tax is very high.

Variable 6

The legal consequences of not paying taxes are clear:

Table 4.3.15 Variable 6; Scores Frequency distribution

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	10	23.80952	23.80952	23.80952
2	7	16.66667	16.66667	40.47619
3	11	26.19048	26.19048	66.66667
4	7	16.66667	16.66667	83.33333
5	7	16.66667	16.66667	100
Total	42	100	100	

The Variable is another issue of certainty. The average score was 2.8. This is close to 3, the score for neither agree nor dis-agree. It is important to note that given the respondents are well learned, yet they are not sure about the consequences then the presumption is that those who are not learned are much less certain about the issue. It is also important to note that the legal issue are laid down in the various Tax Acts (Law of Kenya) whereby they use of English language which is para-legal and therefore one would expect that only literate people and those with background of law would understand it.

The mode score representing 26.2% of the respondents gave a score of 3 whereas 66.7 percent gave a score of 3 or less. Thus majority of taxpayers are not aware of the consequences of the failure to pay tax.

Variables 7, 8 and 9

Table 4.3.16 Variables 7 Scores frequency distribution

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	17	40.47619	40.47619	40.47619
2	8	19.04762	19.04762	59.52381
3	14	33.33333	33.33333	92.85714
4	1	2.380952	2.380952	95.2381
5	2	4.761905	4.761905	100
Total	42	100	100	

Table 4.3.17 Variables 8 Scores frequency distribution

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	11	26.19048	26.19048	26.19048
2	13	30.95238	30.95238	57.14286
3	8	19.04762	19.04762	76.19048
4	6	14.28571	14.28571	90.47619
5	4	9.52381	9.52381	100
Total	42	100	100	

The mode score representing 26.2% of the respondents gave a score of 3 whereas 66.7 percent gave a score of 3 or less. Thus majority of taxpayers are not aware of the consequences of the failure to pay tax.

Variables 7, 8 and 9

Table 4.3.16 Variables 7 Scores frequency distribution

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	17	40.47619	40.47619	40.47619
2	8	19.04762	19.04762	59.52381
3	14	33.33333	33.33333	92.85714
4	1	2.380952	2.380952	95.2381
5	2	4.761905	4.761905	100
Total	42	100	100	

Table 4.3.17 Variables 8 Scores frequency distribution

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	11	26.19048	26.19048	26.19048
2	13	30.95238	30.95238	57.14286
3	8	19.04762	19.04762	76.19048
4	6	14.28571	14.28571	90.47619
5	4	9.52381	9.52381	100
Total	42	100	100	

Table 4.3.18 Variables 9 Scores frequency distribution

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	9	21.42857	21.42857	21.42857
2	16	38.09524	38.09524	59.52381
3	7	16.66667	16.66667	76.19048
4	5	11.90476	11.90476	88.09524
5	5	11.90476	11.90476	100
Total	42	100	100	

These variables are concerned about the strictness with which tax penalties are applied. Each of the penalties, imprisonment, interests and fine was set as a factor of its own to avoid misinterpretation. On average respondents gave a score of 2 for variable 7, 2.5 for variable 8 and 2.09 for variable 9. Most of respondents (40.5%) gave a score of 1 for variable 7 whereas 31% gave a score of 2 for variable 8 and 31% gave a score of 2 for variable 8 and 38% gave a score of 2 for variable 9.

It appears that in each of the cases, the respondents believe that the revenue authority does not strictly apply the penalties. If people believe that penalties are not strictly applied, there is bound to be double jeopardy in that those who do not pay will have no fear for there is no penalty anyway whereas those who are paying will be induced to start evading. It is important that the penalties be seen to be working.

Variable 10

Penalties are levied to all tax defaulters

Table 4.3.18 Variables 10 Scores frequency distribution

score	Frequency	Percent	Valid Percent	Cumulative Percent
1	17	40.47619	40.47619	40.47619
2	14	33.33333	33.33333	73.80952
3	4	9.52381	9.52381	83.33333
4	4	9.52381	9.52381	92.85714
5	3	7.142857	7.142857	100
Total	42	100	100	

This was a follow up on variable factors 7,8 and 9.

The majority being 40.5 percent gave a score of 3 or less. It would be safe to say that the majority of taxpayers believe that some defaulters are not penalised. Where the taxpayers believe that there is favouritism in applications of penalties, there will be a tendency to look for avenues of evading tax. The huge number of respondents in disagreement shows that given a loophole many people would not pay tax for they know other defaulters are not penalised anyway.

Variable 11

People who fail to pay tax bribe their way out.

Table 4.3.20 Variable 11; Scores frequency distribution

score	Frequency	Percent	Valid Percent	Cumulative Percent
1	4	9.52381	9.52381	9.52381
2	3	7.142857	7.142857	16.66667
3	16	38.09524	38.09524	54.7619
4	13	30.95238	30.95238	85.71429
5	6	14.28571	14.28571	100
Total	42	100	100	

This is a follow up on factor 10. It is to confirm the facts about favouritism on tax penalties application and possibility of rules being bent in exchange of bribes. On average the score was 3.3.

This is a middle way response. It is neither agreement nor disagreement. The majority of the people gave a score as 3 (neither agree nor disagree). It is unfortunate that the score is on the middle way.

Whereas it does not confirm the existence or otherwise of bribing it tells us that there is no certainty of its absence. 54.8% of the respondents gave a score of 3 or less. The implications are not very good. Taxpayers need to have high level of certainty that there is no bribing.

Variable 12

Tax cases processed without delay.

Table 4.3.21 Variable 12; Scores frequency distribution

score	Frequency	Percent	Valid Percent	Cumulative Percent
1	18	42.85714	42.85714	42.85714
2	13	30.95238	30.95238	73.80952
3	7	16.66667	16.66667	90.47619
4	2	4.761905	4.761905	95.2381
5	2	4.761905	4.761905	100
Total	42	100	100	

This question assesses the convenience of processing all types of tax cases, be it in the tax offices or in courts. The average score was 1.97 with a standard deviation of 1.11. Majority of the respondents (42.9%) gave a score of 1.

The majority strongly disagrees that the tax cases are processed without delay. The longer it takes to process cases the more the inconvenience on the part of the taxpayer and most likely encourages non-compliance in future. 73.8% of the respondents gave a score of 3 less. This shows that taxpayers are not happy with the rate of processing tax cases.

Variable 13

The tax system is not complicated.

Table 4.3.22 Variable 13; Scores frequency distribution

score	Frequency	Percent	Valid Percent	Cumulative Percent
1	8	19.04762	19.04762	19.04762
2	9	21.42857	21.42857	40.47619
3	8	19.04762	19.04762	59.52381
4	13	30.95238	30.95238	90.47619
5	4	9.52381	9.52381	100
Total	42	100	100	

The variable intends to assess certainty in general about entire tax system. The average score was 2.9 (nearly 3) with a deviation of 1.3. The mode score given by 31.1 % of the respondents was 4. 40.5 % of the respondents gave a score of 2 and 1 while same percentage gave a score of 4 and 5. The respondents are neither in agreement nor disagreement that the tax system is not complicated. Though the range is 4 (i.e. 5-1) there are more respondents giving a score of one than those giving a score of five. A lesson learnt here is that though there is no express indication of complication, it is important that the measures be taken to reduce any element of complications.

Variable 14

There is fair treatment to all citizens.

Table 4.3.23 Variable 14; Scores frequency distribution

score	Frequency	Percent	Valid Percent	Cumulative Percent
1	17	40.47619	40.47619	40.47619
2	10	23.80952	23.80952	64.28571
3	6	14.28571	14.28571	78.57143
4	6	14.28571	14.28571	92.85714
5	3	7.142857	7.142857	100
Total	42	100	100	

This Variable centres on attitude about fairness of the tax charges without specifically pointing out a particular element. A good tax system should ensure fairness, that is, justice to all citizens. In essence it should ensure that tax is based on ability to pay. There was no intention in any way to subject the variable to debate on what fairness is, though such a question is inevitable, but rather to look at each respondent attitude with regard to fairness. On average the respondents gave a score of 2.2(that is moderately disagree) with a standard deviation of 1.32. Such a score is relatively poor. A feeling of unfairness among taxpayer only yields resistance to tax payment. The majority of respondents (40.5%) gave a score of 1. 64.3% of the respondents gave a score of 2 or less while 78.6% gave a score of 3 or less. It is important that justice be seen to exist.

Variable 15

Tax authorities are always available to help in case of any tax computation problems.

Table 4.3.24 Variable 15; Scores frequency distribution

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	9	21.42857	21.42857	21.42857
2	17	40.47619	40.47619	61.90476
3	10	23.80952	23.80952	85.71429
4	3	7.142857	7.142857	92.85714
5	3	7.142857	7.142857	100
Total	42	100	100	

Where there is uncertainty about certain tax issues, the tax authority should put in place a mechanism to ensure prompt response to taxpayers problems in computing and filing returns.

On average the respondents gave a score of 2.3 to this variable.

Majority of respondents (40.5) gave a score of 2 (moderately disagree). It is evident that the tax authorities do not provide adequate assistance on this matter. It means that taxpayers are left helpless or at the mercy of expensive tax consultants. The machinery for assisting taxpayers in computing their tax should be availed to reduce uncertainty.

Variable 16

Tax revenue can be increased by better administration without increasing rates or introducing new taxes.

Table 4.3.25 Variable 16; Scores frequency distribution

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	3	7.142857	7.142857	7.142857
3	1	2.380952	2.380952	9.52381
4	8	19.04762	19.04762	28.57143
5	30	71.42857	71.42857	100
Total	42	100	100	
	42	100		

Literature shows that in pursuit of increased revenue, most developing countries have tendency of either raising tax rates or bringing in new taxes. It has been observed that tax revenue can be increased by better administration. The variable was meant to capture respondents' attitude on this matter to confirm their concern on administrative efficiency. The average score was 4.4, which indicates a high level of agreement with the factor. The standard deviation was 1.08.

The majority being 71.4% of the respondents gave a score of 5 showing that about 3/4 of the respondents are in total agreement that tax payer can be increased with better administration.

90.4% of respondents gave a score of 4 or 5.

Even though they are not directly involved in the tax administration itself, there is an indication that they are aware of low administrative efficiency on the part of tax authority. They must be feeling that the compliant taxpayers are made to bear the burden of inefficiency of the tax authority.

Variable 17

Taxpayers are aware of the social responsibility.

Table 4.3.26 Variable 17; Scores frequency distribution

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	7	16.66667	16.66667	16.66667
2	11	26.19048	26.19048	42.85714
3	8	19.04762	19.04762	61.90476
4	14	33.33333	33.33333	95.2381
5	2	4.761905	4.761905	100
Total	42	100	100	

Literature has shown that tax compliance depends on peoples' awareness of their social responsibilities. Where they are not aware that they are responsible for the well being of the society, there will be a high level of tax evasion. On average the respondents believed that the taxpayers were middle way aware of their social responsibility having given a score of 2.8 and a standard deviation of 1.2. The majority of the respondents forming 33.3% gave a score of 4 while 61.91% gave a score of 3 or less. 38.1% gave a score of 4 or more while 42.9% of the respondents gave a score of 2 or less. The score shows that there is neither agreement nor disagreement on this issue.

It is important that taxpayers be certain of their social responsibility. A sense of civic consciousness needs to be instilled to the citizens to make them responsible to the tax system.

Variable 18

Information on changes in the tax system is conveniently communicated to taxpayers.

Table 4.3.27. Variable 18; Scores frequency distribution

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	7	16.66667	16.66667	16.66667
2	14	33.33333	33.33333	50
3	9	21.42857	21.42857	71.42857
4	11	26.19048	26.19048	97.61905
5	1	2.380952	2.380952	100
Total	42	100	100	

This is another test of tax convenience of information in general. Often revenue authority uses various media to communicate information on changes of tax matters like dates of payments.

The average score was 2.6 which slightly above the moderate disagreement. The standard deviation is 1.12. The majority of taxpayers are in disagreement that the information is conveniently communicated. 33.3% gave a score of 2 while 50% gave a score of 2 and 1.

71.41% gave a score of 3 and less.

Variable 19

There are no wealthy groups with enough power to block tax measures levelled on them.

Table 4.3.28 Variable 19; Scores frequency distribution

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	19	45.2381	45.2381	45.2381
2	12	28.57143	28.57143	73.80952
3	7	16.66667	16.66667	90.47619
4	2	4.761905	4.761905	95.2381
5	2	4.761905	4.761905	100
Total	42	100	100	

There is a need to ensure that no special treatment is accorded to some people. This was discussed earlier on variable 10 and 11. The existence of people with power to block tax measures on them encourages others to evade tax. On average respondents gave the variable a score of 1.95. The majority of respondents strongly disagreed that there are no wealth groups with enough powers to block tax measures levelled on them. 45.2% gave a score as 1. This is almost half of the respondents showing just how much disagreement with this variable there is. 73.8% of the respondents gave a score of 1 and 2 confirming further that there is a high disagreement with the variable.

Variable 20

Tax authorities provide simple explanations of the tax system.

Table 4.3.29 Variable 20; Scores frequency distribution

Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	7	16.66667	16.66667	16.66667
2	16	38.09524	38.09524	54.7619
3	7	16.66667	16.66667	71.42857
4	10	23.80952	23.80952	95.2381
5	2	4.761905	4.761905	100
Total	42	100	100	

Any tax system will always have areas difficult to understand due to technical language used. It is important that the tax authority ensure simplification so those taxpayers including the lay people can easily understand it.

On average the respondent gave a score of 2.6 for this factor with a standard deviation of 1.16.

The majority being 38.1% of the respondents gave a score of 2. 54.8% of respondents gave a score of 2 or 1. There is an apparent disagreement that the tax authority provides simple explanations. It does not mean that no explanation is provided at all but rather it implies that if there is any explanations provided, then they are not enough.

4.3.6 FACTOR ANALYSIS

The objective of this analysis is to reduce the variables into a group of factors. This ensures that the variables are summarised into units around which they co-vary. The results were generated by factor analyses module of SPSS version 7.5.

The variables were reduced to five factors as follows:

Diagram 4.3.1 General tax system factor extraction by Scree Plot

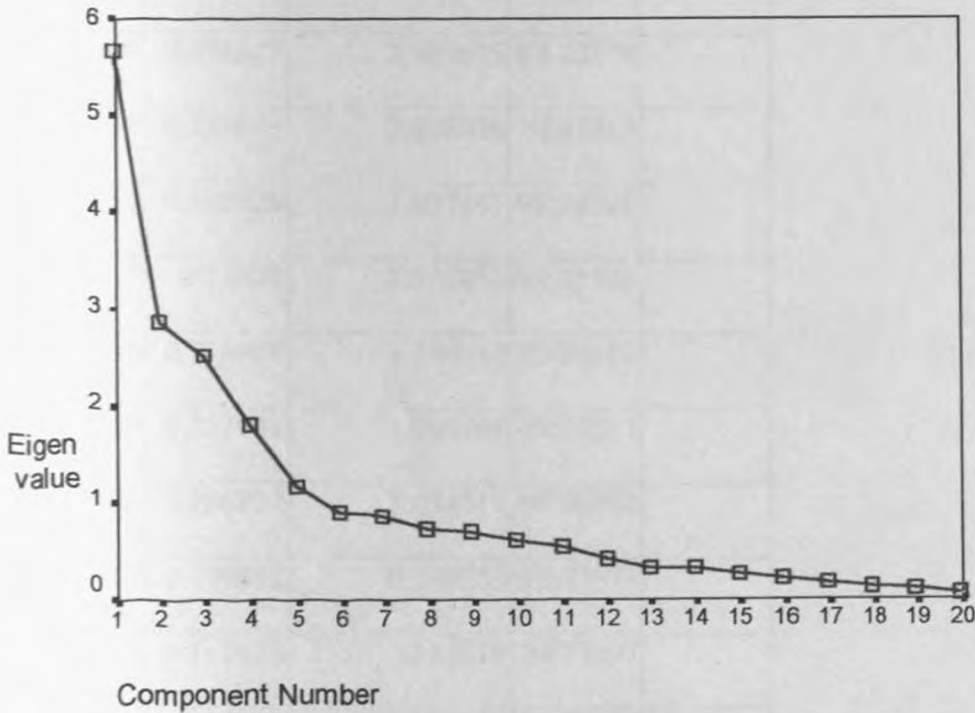


Table 4.3.30 Eigen values for the general tax system

Component	Initial Eigenvalues		Cumulative %
	Total	% of variance	
1	5.656534	28.28267	28.28267
2	2.850537	14.25268	42.53536
3	2.494383	12.47191	55.00727
4	1.779621	8.898106	63.90538
5	1.138087	5.690436	69.59581
6	0.892054	4.460269	74.05608
7	0.837848	4.189238	78.24532
8	0.709322	3.54661	81.79193
9	0.694245	3.471226	85.26316
10	0.592527	2.962635	88.22579
11	0.523615	2.618076	90.84387
12	0.387429	1.937143	92.78101
13	0.31401	1.570051	94.35106
14	0.298989	1.494944	95.84601
15	0.237881	1.189404	97.03541
16	0.206822	1.034111	98.06952
17	0.149851	0.749253	98.81877
18	0.111638	0.55819	99.37697
19	0.08372	0.418599	99.79556
20	0.040887	0.204436	100

Extraction Method: Principal Component Analysis.

The factors were identified by using the varimax with Kaiser normalisation rotation method as follows:

Table 4.3.31

Component Score Coefficient Matrix					
	Component				
	1	2	3	4	5
VAR001	0.067783	0.121513	-0.21007	-0.12458	0.260314
VAR002	-0.01737	-0.03638	-0.02381	0.372856	0.121046
VAR003	-0.00975	-0.01834	-0.08478	0.422257	-0.1126
VAR004	-0.04769	0.204264	-0.03911	0.112379	0.150019
VAR005	-0.05212	0.163032	-0.02578	0.135904	-0.14785
VAR006	-0.02485	0.056423	0.254835	0.068387	0.009644
VAR007	0.054814	0.190018	-0.00356	-0.05409	0.059759
VAR008	-0.04789	0.287073	0.048181	-0.11713	0.075891
VAR009	-0.10368	0.295866	0.149118	-0.15087	-0.18953
VAR010	0.114243	0.109045	-0.09758	-0.00885	-0.08875
VAR011	0.046529	-0.02199	0.051377	-0.01672	0.453944
VAR012	0.184956	-0.03059	0.043431	-0.15057	-0.07486
VAR013	0.171947	-0.16225	-0.01108	0.276149	0.110576
VAR014	0.193722	-0.01909	-0.30229	0.177909	0.010028
VAR015	0.2039	-0.01929	0.008561	-0.02209	0.143516
VAR016	-0.11825	0.042777	-0.08239	0.140996	0.373767
VAR017	-0.06134	0.020834	0.371196	-0.02594	0.041345
VAR018	0.045626	0.040466	0.367455	-0.20161	-0.08327
VAR019	0.184906	0.011658	-0.07599	-0.02537	0.125489
VAR020	0.165086	-0.08945	0.07068	0.108258	-0.05222
Extraction Method: Principal Component Analysis.					
Rotation Method: Varimax with Kaiser Normalization.					
Component Scores.					

The factors are summarised as follows:

Table: 4.3.32 Factors affecting attitude general tax system

	1 st factor	2 nd factor	3 rd factor	4 th factor	5 th factor
Variables	10	4	6	2	1
“	12	5	17	3	11
“	14	7	18	13	16
“	19	8			-
“	20	9	-	-	-

The factors were identified by analysing the common attributes among the variables where possible and ignoring the seemingly unrelated variables are as follows:

- 1 Fairness
- 2 Application of controls
- 3 Information on tax matters
- 4 Use of tax revenue
- 5 Efficiency of administration

FACTOR I

Fairness

A good tax system must ensure fair treatment to all taxpayers.

Fairness here means equal treatment of equals. Taxpayers will dislike a system that is characterised by nepotism, racism, or classicism. A situation where taxpayers know that there are some people accorded special treatment due to say colour, political strength, economic strength and the like will only encourage taxpayers look for ways and means of evading tax. There would be very low levels of voluntary compliance.

Every tax system must seek for voluntary compliance because besides increase in revenue it lowers costs of audit and follow-up on non-compliant taxpayers. Taxpayers believe that there is low level of fairness. This includes fairness in charge of tax and application of the law.

FACTOR II

Application of controls

The second identified factor is application of controls. Literature has shown that the lower the degree of controls the higher the evasion. Low level of control not only fails to capture the non-compliant taxpayer but also encourages the compliant taxpayers to default.

There is an indication that the tax system controls are low. They can be bent at Will as perceived by the respondents. These controls include identification of taxpayers and also application of penalties to defaulters. The earlier section observed that the scores of application of penalties were on the lower side implying that the system is loose. The Law must not only be seen in book but also in application. If the law is not applied then it is just as bad as not existing at all.

FACTOR III

Information on tax matters

Taxpayers must be furnished with necessary information to facilitate voluntary compliance. This information will include the, how, when and where to pay tax and particularly important why to pay the tax. The information facilitates certainty of the tax system. Literature has shown that compliance to some extent depends on level of certainty. The more certain a tax is the higher the compliance. In this case information on tax matters is a problem. As observed from the scores on the earlier section, something must be done to educate taxpayers. This must include matters of the law, creating civic consciousness, and training on how to file returns. This will be expensive but it is a worthwhile expenditure. Any tax changes must be conveniently communicated to taxpayers.

FACTOR IV

Use of Tax Revenue

The use to which government applies the tax revenue must be known to the taxpayers and also be seen to be beneficial to them. Where taxpayers are not aware about how tax revenue is applied, or if they are discontented with manner in which government applies revenue, then they would rather not pay the tax. It is only through the use of the power of the government that they pay tax.

The extent of evasion and corruption would be high with people looking for all avenues legal or otherwise to cut down their obligation. In this study it is observed that the use of tax revenue was not clear to respondent nor did they perceive benefits from use of the tax. For the revenue authority to be successful in its tax collection the government must let the taxpayers appreciate the application of tax revenue.

FACTOR V

Efficiency of administration

An efficient administration ensures expedient collection of tax and response to taxpayer questions. It ensures that tax is collected at lowest costs and also covers a wide spectrum such that no single group of people will feel that they carry the burden of the nation. In this research the issue arose about efficient administration in tax collection especially increasing revenue without recourse to additional taxes or increasing rate. There was almost unanimous agreement among the respondents on this issue. The other element of this factor was bribing where by the respondents were more or less in the middle about its existence or not.

4.3.7 ANALYSIS OF ATTITUDE TOWARDS INDIVIDUAL TAXES

A 15-point questionnaire was set to analyse the response with respect to each of the major taxes

The analysis by summary statistics is given below.

Table 4.3.33 MODE SCORES ON ATTITUDE TOWARDS SPECIFIC TAXES

VARIABLE	Corporate Tax		W/holding Taxes		V.A.T		Custom duty		Excise duty	
	MD	PI	MD	PI	MD	PI	MD	PI	MD	PI
1	4	42.9	4	33.3	3	28.6	3	35.7	3	45.2
2	1	40.5	1	45.2	1	35.7	1	38.1	1	35.7
3	1	35.7	1	31	2	35.7	3	28.6	3	31
4	1	33.3	5	26.2	2	26.2	3	38.1	3	45.2
5	4	45.2	4	50	4	40.5	3	28.6	3	40.5
6	3	35.7	3	28.6	3	40.5	3	40.5	3	54.8
7	1	45.2	1	31	1	45.2	3	31	1	40.5
8	1	38.1	1	42.9	1	47.6	1	33	3	31.0
9	4	26.2	1	31	4	23.8	3	35.7	2	45.2
10	2	35.7	2	33	2	33.3	2	47.6	3	38
11	1	40.5	1	45	3	42.9	3	42.9	3	54.8
12	1	64.3	1	54	1	51.1	1	35.7	1	40.5
13	1	38.1	2	45	2	35.7	3	35.7	3	47.6
14	5	40.5	5	40	5	35.7	5	28.6	3	33.3
15	4	38.1	4	33	4	26.2	3	40.5	3	47.6

MD=MODE

PI=PERCENTAGE OF MODE FREQUENCY TO TOTAL.

SOURCE: PRIMARY DATA

Table 4.3.34 AVERAGE SCORES ON INDIVIDUAL TAXES

VARIABLE	Corporate Tax		W/holding Taxes		V.A.T		Custom/ Import Duty		Excise duty	
	M	S	M	S	M	S	M	S	M	S
1	3.3	1.2	3.4	1.2	2.9	1.2	3.1	1.2	2.9	1.1
2	2.5	1.7	2.3	1.6	2.6	1.5	2.4	1.3	2.3	1.2
3	2.4	1.5	2.9	1.6	2.9	1.4	2.9	1.4	2.8	1.3
4	2.6	1.4	3.1	1.5	3.1	1.4	2.9	1.2	2.8	1.3
5	3.5	1.2	3.6	1.1	2.8	1.2	2.8	1.3	3	1.1
6	2.7	1.2	2.7	1.3	2.6	1.1	2.7	0.8	2.7	0.9
7	1.9	1.0	2.5	1.3	1.9	1.0	2.1	1.0	2.2	1.1
8	2.4	1.4	2.2	1.4	2.1	1.3	2.3	1.1	2.3	1.1
9	2.8	1.4	2.8	1.5	2.9	1.3	2.7	1.1	2.7	1.1
10	2.8	1.1	2.9	1.1	2.5	1.2	2.4	0.9	2.5	0.9
11	2.2	1.2	2.1	1.2	2.3	1.0	2.3	1.0	2.4	0.9
12	1.6	0.97	1.8	1.1	1.7	1.0	1.9	1.0	2.0	1.0
13	2	1	2.1	1	2.0	0.9	2.3	1.0	2.3	0.9
14	3.8	1.4	3.6	1.5	3.4	0.9	3.4	1.3	3.4	1.2
15	3	1.2	2.9	1.3	2.9	1.3	2.4	1.0	2.5	0.9

M=mean

S=standard deviation

Source: Primary Data.

1) CONVINIENCE OF TIME IN PAYING TAX

VAT had the least average of 2.9 compared to the other major taxes as observed from table 4.10. The standard deviation for VAT score is equal to that of corporate tax, withholding and custom duty but slightly different from excise duty. The standard deviation shows that the deviation is not materially different for each tax.

2) SEPARATE SET OF ACCOUNTS

In almost all taxes there was an absolute disagreement that a separate set of accounts is required. The majority of respondents gave a score of 1 for each of the taxes showing that tax matters are incorporated in the mainstream accounting.

3) NEED FOR TAX EXPERTS

The highest average score for this attribute was 2.9 whereas the least was 2.4. Withholding taxes, V.A.T, and custom duty had a score of 2.9 each. The mode score for corporate tax and withholding taxes was 1 given by a proportion of 35.7% and 31%. Respectively. VAT had a score of 2 given by a proportion of 35.7% while custom and excise duty each had a score of 3 given by a proportion of 28.6% and 31% respectively. The statistics indicate that in almost all taxes, tax experts are required. It shows that there is an additional burden imposed by the tax system to the taxpayer with respect to hiring services of tax experts.

4) COST OF ASCERTAINING TAX OBLIGATION

The highest average score in this case is 3.1 for withholding taxes while the lowest is 2.6 for corporate taxes. This is between neither agree nor disagree and moderately disagree.

With the point that the process is not expensive. The mode score for corporate tax was 1

given by 33.3% as respondents while the highest was 5 for withholding tax given by 26.2%.

VAT mode score was 2 given by 26.2% while that of custom and excise duty is 3. It follows that the system is expensive for corporate tax and VAT on and cheapest for withholding taxes.

5) CONVINIENCE OF MODE OF PAYMENT

The scores on average are impressive with highest being 3.6 for withholding taxes and lowest 2.8 for custom duty. The mode score was also appealing with the highest score being 4 for corporate tax, withholding taxes and VAT while lowest being 3 for custom and excise duty.

There is an indication that the tax system is convenient in terms of mode of payment.

6) ASSISTANCE IN TAX COMPUTATION

Average score was least at 2.6 for V.A.T highest at 2.7 report for all the other taxes. The response on average lies between moderately agrees and neither agrees nor disagrees with the fact that tax authority is willing to help in case of tax competition problems.

The mode score for each of the taxes was 3 with proportions giving the score being 28.6% at the least reported for withholding taxes and 54.8% for excise duties. Based on the figures there is an almost consensus that the respondents neither agree nor disagree.

7) CONVINIENCE OF MONEY AVAILABILITY AT TIME OF PAYMENT

This was meant to be a confirmation of the first factor, which was to tell about convenience of time of payment. A good tax system must be so convenient that one is not made to borrow or look for finances so as to meet his tax obligation. The average score for this issue were moderately low. The highest average score was 1.9 reported for both V.A.T and corporate tax. Incidentally both V.A.T and corporate tax standard deviation for this score was the same

as that one of custom and duties. Mode scores were 1 for all the taxes except custom duty, which was 3. The percentage giving the mode score is significant given that it was 45.2% for both corporate tax and VAT 40.5% and 31% for both withholding taxes and excise duty respectively. There is an indication that for most of the taxes and especially corporate tax and VAT, the taxpayers are required to pay when they do not have money. However this must be interpreted with caution given that tax is sensitive issue as it consumes peoples resources.

8) STRICTNESS OF TAX SYSTEM IN ERADICATING EVASION

Average score range from 2.4 (corporate tax) to 2.1 to VAT. The tax system seems to be loose in curbing evasion. The score are mere close to moderately disagree. The mode score was 1 for all taxes except excise duty, which reported 3. The proportion giving the mode score is significant ranging from 47.6% for VAT 31% for custody.

This confirms that majority of respondents believe that there is plenty of tax evasion.

As earlier observed this just encourages more evasion.

9) APPLICATION OF PENALTIES

The average scores range from 2.9 (for VAT) and 2.7 (for both custom and excise duty) The score are very close to the middle way. Mode scores were 4 for corporate tax and VAT but 1 for withholding taxes. In terms of average there is an almost consensus that the respondents neither agree nor disagree. However in terms of the mode the difference of opinion is huge indicating that there is mixed feelings on this issue. Penalties seem to be tight with corporate and VAT and loose for withholding taxes and excise duties.

The corporate tax response Bimodal at 1 and 4. There is a possibility of misinterpretation as a result of questions given earlier shows that generally the tax system has poor application of penalties.

10) TAX DOES NOT DISCOURAGE PRODUCTION

Average scores range from 2.9 for withholding taxes and 2.4 for custom duty. The difference is small and the score indicate a value between neither agree nor disagree (middle way) to moderately disagree. Clearly it is on the negative side implying a feeling that taxes some how affects a production. The mode score is 2 for all taxes expect excise duty that had a score of 3. This further confirms that taxes do discourage production. The proportion giving a score of the production. The proportion giving a score of the mode is also significant being the values between 33% to 38%.

(11) KRA TRAINING TO TAX PAYERS

Average score for this factor is ranging between 2.4 (excise duty) to 2.1 withholding taxes. These values are close to moderate disagreement with the fact that KRA trains taxpayers on important matters. The mode score were least at 1 for corporate taxes and withholding taxes and 3 for both VAT, custom duty and excise duty. The proportion giving the mode scores were all over 40% showing that they are significant. There is need to provide training especially for corporate tax, withholding taxes and VAT.

12) PROCESS OF REFUNDS

The average scores for these facts were very low, they range between 2.0 for excise duty to 1.6 for corporate tax. Mode score was one for all the taxes. The proportions giving the mode ranging from 40.5 to 64.3%. There is an absolute concern about process of tax refunds, which it seems to the majority, is not expedient.

13) TAXPAYERS SATISFACTION WITH MANNER IN WHICH KRA DEALS WITH TAX AFFAIRS.

Average score rang from 2, 3 and to 2.0. The margin is too narrow and indicate a lean towards a score moderately disagree. Mode score was highest at 3 for both custom and excise duty and 1 for corporate tax mode value for VAT and withholding tax 1.

The respondents have a feeling that the manner that KRA deals with tax affairs is not satisfactory. However the dissatisfaction is only moderately disagree with the factor.

14) OBJECTIVE OF TAX IS TO DEVELOP THE ECONOMY.

Average score for this matter is above 3 for all taxes being 3.8 at the highest and 3.4 at the lowest. The mode score was for Corporate Withholding taxes and VAT while 3 for custom and excise duty. The indication is that respondents believe tax confirms the earlier agreement that there is a general agreement about need to pay taxes so long as they can see some benefits in form of development.

15) THE EASE OF FOLLOWING RULES AND REGULATIONS

The average score range between 2.4 and 3. The mode score is 4 for the corporate withholding and VAT and 3 for custom and excise duties. On average the score shows that there is a middle way feeling about ease of following rules and regulations.

The tax does not seem to be complicated for respondents.

4.3.8 FACTOR ANALYSIS FOR INDIVIDUAL TAXES.

FACTORS AFFECTING ATTITUDE TOWARDS CORPORATION TAX

The factor analysis reduced data into 5 factors as shown below:

4.3.35 Eigen values For Corporation Tax

Total Variance Explained			
	Initial Eigenvalues		
Component	Total	% of Variance	Cumulative %
1	4.076145	27.1743	27.1743
2	1.931223	12.87482	40.04912
3	1.543254	10.28836	50.33748
4	1.322716	8.818108	59.15559
5	1.116741	7.444938	66.60053
6	0.901615	6.010768	72.61129
7	0.811377	5.409181	78.02048
8	0.723677	4.824517	82.84499
9	0.579598	3.863989	86.70898
10	0.537275	3.581832	90.29081
11	0.49687	3.312468	93.60328
12	0.402162	2.68108	96.28436
13	0.249986	1.666575	97.95094
14	0.190435	1.269567	99.2205
15	0.116925	0.779498	100

Extraction Method: Principal Component Analysis.

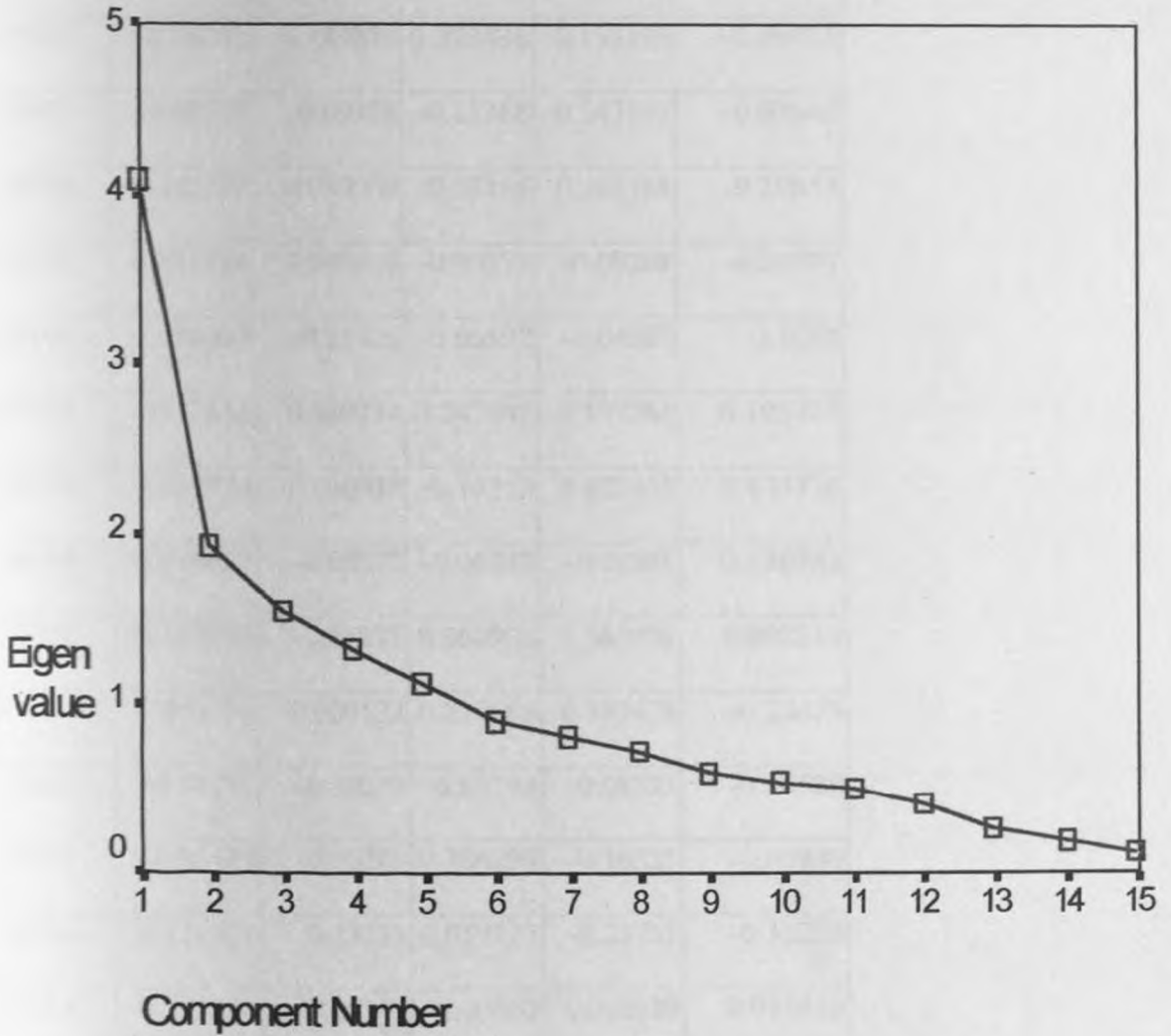


Table 4.3.36 Corporate tax component score coefficient matrix

	Component				
	1	2	3	4	5
VAR001	-0.24675	0.542849	-0.06816	0.047438	0.097515
VAR002	-0.46051	0.189877	0.222436	0.158195	-0.09431
VAR003	-0.02197	-0.09188	-0.11368	0.547103	-0.03642
VAR004	0.182777	0.039969	-0.03165	0.263188	-0.20853
VAR005	0.011784	0.390649	-0.09273	-0.08208	-0.01997
VAR006	0.256689	-0.11426	0.06502	-0.04587	0.1018
VAR007	-0.17642	0.080734	0.247442	0.193261	0.105717
VAR008	0.016924	0.090938	-0.10719	0.102415	0.433736
VAR009	0.044652	-0.08272	-0.06242	-0.18501	0.576782
VAR010	0.162859	-0.05273	0.060906	0.160408	0.092319
VAR011	0.065716	0.008592	0.229689	0.183678	-0.22439
VAR012	-0.07791	-0.10277	0.50193	-0.08823	-0.10528
VAR013	-0.01445	-0.05289	0.386297	-0.10525	-0.00849
VAR014	0.121571	0.23323	0.059327	-0.23751	-0.15255
VAR015	0.233331	0.107949	0.00562	0.010539	0.010118

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Component Scores.

These factors are summarised in below:

Table: 4.3.37 Factors Affecting Attitude Towards Corporation Tax

	1 st factor	2 nd factor	3 rd factor	4 th factor	5 th factor
Variables	6	1	2	3	8
"	10	5	7	4	9
"	15	14	11		
"			12		

FACTOR 1

Tax administration assistance to taxpayers.

The variables involved are assistance accorded to taxpayers by the Kenya Revenue Authority in terms as understanding the tax system, the rules and regulations of the tax and especially computational problems.

FACTOR 11

Convenience of the tax system.

The variables involved are convenience of time and mode of payment. Convenience is known to be one of smithian criterion of a good tax system. It is established to be one of the factors that influence the performance of the tax system and attitude towards the system.

FACTOR 111

Certainty

This factor had the highest load or variables. The certainty issues observed includes, how to prepare records, knowledge of tax matters and also involves matter on training to tax payers from KRA. Certainty is a very a crucial factor in the determining attitude towards a tax system and also its productivity. Tax system that is not certain develops a high degree of evasion

FACTOR IV

Cost

A good tax system should be economical. The cost matters are clearly captured by variable 4 and 5. The variables indicate that cost is important consideration that taxpayers put in assessing a tax. This is expected given that it is one of the smithian cannons of taxation.

FACTOR V

Strict application of the law.

This factor was also identified in the analysis of the attitude towards the entire tax system.

It revolves around strictness of application of penalties and control of tax evasion.

FACTORS AFFECTING ATTITUDE TOWARDS WITHHOLDING TAX

The factor analysis reduced the data into 5 factors as follows:

4.3.38 EigenValue For Withholding Taxes

Total Variance Explained			
Initial Eigenvalues			
Component	Total	% of Variance	Cumulative %
1	3.228256	21.52171	21.52171
2	2.520986	16.80657	38.32828
3	1.926294	12.84196	51.17024
4	1.559108	10.39406	61.56429
5	1.016667	6.777777	68.34207
6	0.929161	6.194406	74.53648
7	0.850454	5.669695	80.20617
8	0.774251	5.161672	85.36784
9	0.56175	3.745002	89.11285
10	0.434727	2.898177	92.01102
11	0.425935	2.839567	94.85059
12	0.279529	1.863524	96.71411
13	0.234513	1.563422	98.27754
14	0.149775	0.998497	99.27603
15	0.108595	0.723968	100

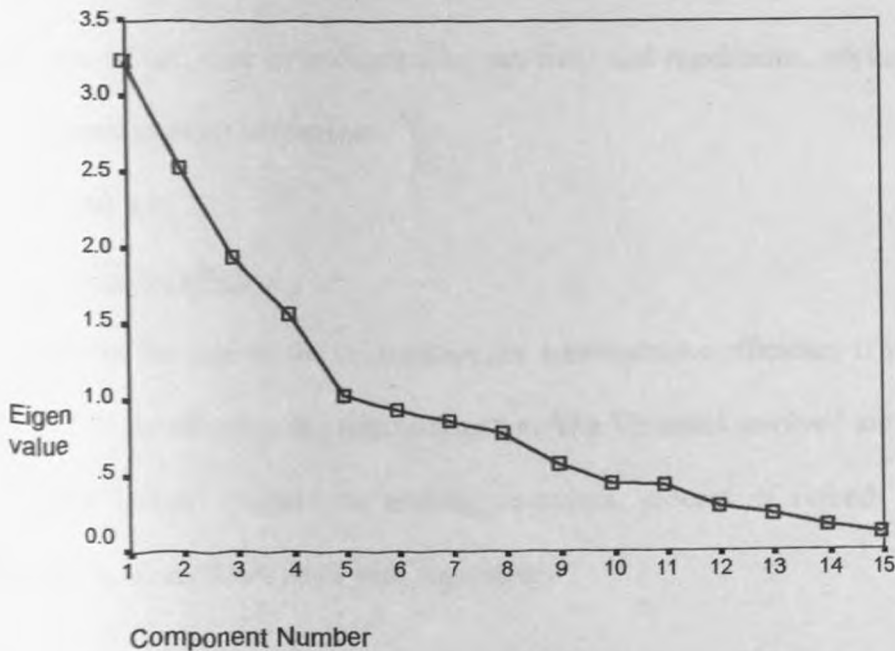
Extraction Method: Principal Component Analysis.

The factors were identified through the varimax rotation method as follows:

	Component				
	1	2	3	4	5
VAR001	0.310853	-0.00778	-0.10147	-0.01111	0.132683
VAR002	-0.04966	-0.1317	-0.01243	0.390339	0.00534
VAR003	0.311332	-0.19701	0.069161	0.096328	0.06995
VAR004	0.317648	-0.01707	0.036413	0.101036	-0.11691
VAR005	0.268747	0.059356	-0.05993	-0.19974	0.059561
VAR006	-0.09037	0.382022	-0.10284	0.000705	0.095695
VAR007	0.035823	0.000347	0.018651	0.159734	0.384451
VAR008	0.076205	0.031849	-0.01606	-0.12365	0.49423
VAR009	-0.16689	0.231274	0.069661	0.001245	0.163792
VAR010	0.088076	0.201875	-0.18677	0.591194	-0.07792
VAR011	0.001325	0.138457	0.256466	-0.17553	0.073131
VAR012	-0.08732	-0.11006	0.550331	-0.17473	-0.04519
VAR013	-0.01146	-0.05937	0.400745	0.005916	0.026801
VAR014	0.015054	0.206649	0.089825	0.039279	-0.33403
VAR015	0.073575	0.339153	-0.10837	0.170858	-0.12417

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 Component Scores.

Diagram 4.3.3 Withholding Tax Factor Extraction by Scree Plot



The factors affecting the attitude towards 5th withholding taxes are summarised below:

Table: 4.3.40 Factors Affecting Attitude Towards Withholding Taxes

	1 st factor	2 nd factor	3 rd factor	4 th factor	5 th factor
Variables	1	6	11	2	7
"	3	9	12	10	8
"	4	14	13		
"	5	15	13		

FACTOR 1

Cost and convenience

The variables in this class includes cost and convenience matters. Just as identified in corporation tax, cost and convenience are some of the factors that affect taxpayers attitude to a tax system. The convenience issue includes timing of payment and mode of payment.

The cost issues include use of experts and process of ascertaining tax obligations.

FACTOR 11

Certainty

Variables in the second factor include the matters on certainty. The certainty issues includes objective of tax, ease of understanding tax rules and regulations, application of penalties and willingness to assist taxpayers.

FACTOR 111

Administrative efficiency

Just like in the case of the corporation tax administrative efficiency is identified as one of the major factors affecting the withholding tax. The Variables involved are 11, 12 and 13. These variables include matters on training taxpayers, process of refunds and satisfaction with manner in which KRA deals with tax matters.

FACTOR IV

Allocation of resources

This factor includes variables 2 and 10. The variables relate to the effect of tax on accounting work and firms production. A good tax system should be neutral to the allocation of resources or at least lead to more optimal resource allocation.

FACTOR V

Tax controls

There are two variables in this group which seem to be unrelated. Variable 7 is an issue of convenience and is captured in another factor. This factor involves strictness of tax controls. Tax controls are necessary to ensure that not only are defaulter are brought to book but also deter potential defaulters.

FACTORS AFFECTING ATTITUDE VALUE ADDED TAX

Factor analysis reduced the data to five factors as follows:

Table 4.3.41 Eigen Values For Value Added Tax

Total Variance Explained			
Initial Eigenvalues			
Component	Total	% of Variance	Cumulative %
1	4.701966	31.34644	31.34644
2	2.029482	13.52988	44.87632
3	1.413269	9.421793	54.29811
4	1.274939	8.499594	62.7977
5	1.101636	7.344237	70.14194
6	0.808339	5.38893	75.53087
7	0.737285	4.915237	80.44611
8	0.689988	4.599917	85.04603
9	0.639817	4.265448	89.31147
10	0.587468	3.91645	93.22792
11	0.349297	2.32865	95.55657
12	0.239093	1.593954	97.15053
13	0.201446	1.342976	98.4935
14	0.132183	0.881223	99.37473
15	0.093791	0.625274	100

Extraction Method: Principal Component Analysis.

Diagram 4.3.4 Value Added Tax Factor Extraction by Scree Plot

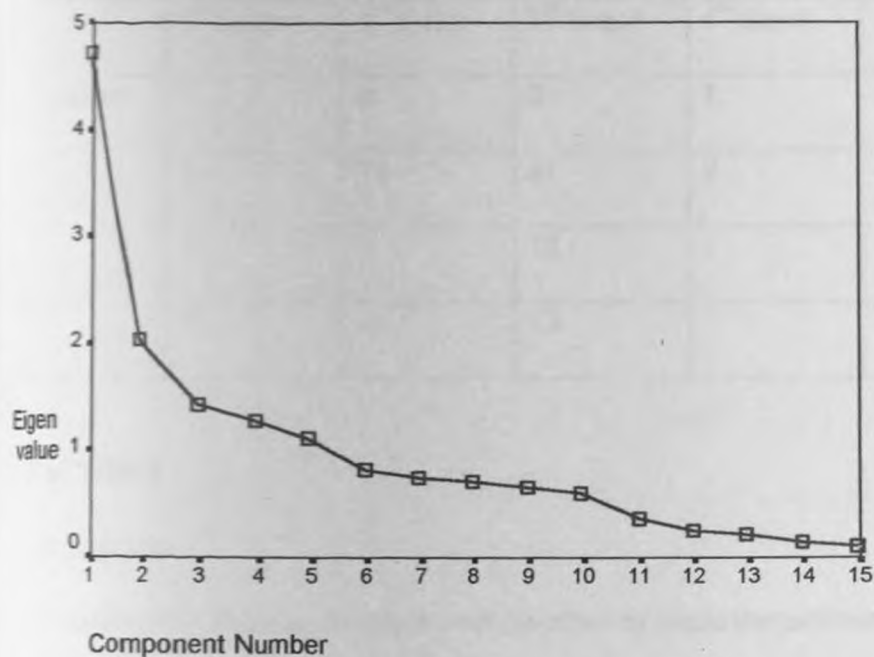


Table 4.3.42

VAT Component Score Coefficient Matrix					
	Component				
	1	2	3	4	5
VAR001	0.162923	-0.0202	-0.17944	0.130188	-0.26109
VAR002	0.091734	-0.36675	0.173469	-0.09979	-0.19408
VAR003	-0.15599	-0.00886	0.051302	0.57881	0.051043
VAR004	-0.14653	0.362989	0.202241	-0.05806	-0.22965
VAR005	0.35047	0.037002	-0.17553	-0.30971	-0.20991
VAR006	0.140266	0.124383	0.082657	-0.12163	0.127578
VAR007	0.212176	-0.24729	0.103038	0.165836	-0.07084
VAR008	0.25001	-0.25207	-0.13262	0.298383	0.202035
VAR009	-0.01982	0.090226	-0.03611	0.065358	0.624324
VAR010	0.222142	0.022468	-0.01673	-0.11268	0.024053
VAR011	-0.06818	0.068646	0.31016	0.170206	-0.02972
VAR012	-0.14567	-0.02837	0.542591	0.039834	-0.03227
VAR013	0.137984	-0.01368	0.260563	-0.26468	0.140713
VAR014	0.040197	0.395385	-0.02701	-0.16296	0.069424
VAR015	0.128447	0.116443	-0.01733	0.123451	0.006157

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Component Scores.

Diagram 4.3.4 Value Added Tax Factor Extraction by Scree Plot

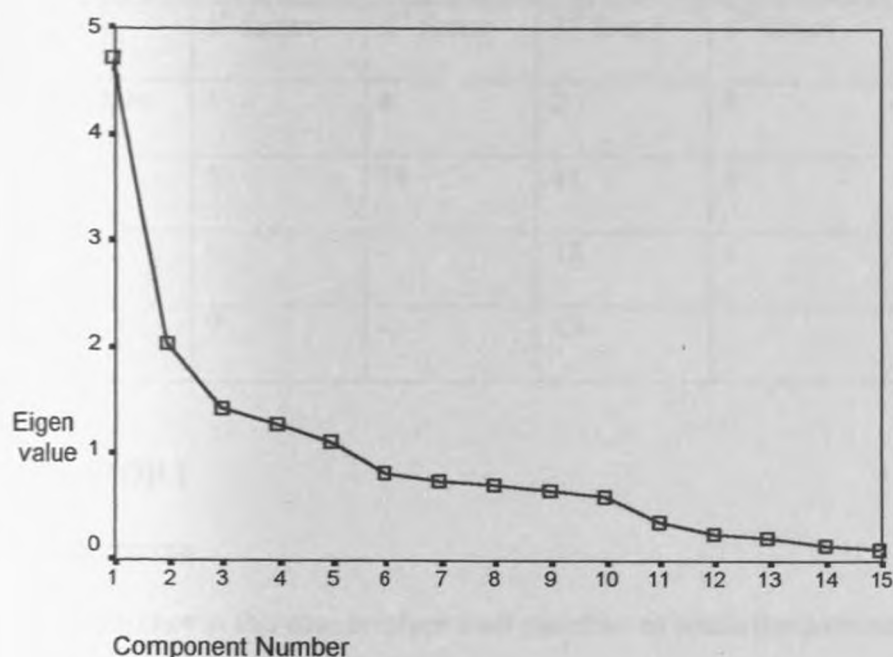


Table 4.3.42

VAT Component Score Coefficient Matrix					
	Component				
	1	2	3	4	5
VAR001	0.162923	-0.0202	-0.17944	0.130188	-0.26109
VAR002	0.091734	-0.36675	0.173469	-0.09979	-0.19408
VAR003	-0.15599	-0.00886	0.051302	0.57881	0.051043
VAR004	-0.14653	0.362989	0.202241	-0.05806	-0.22965
VAR005	0.35047	0.037002	-0.17553	-0.30971	-0.20991
VAR006	0.140266	0.124383	0.082657	-0.12163	0.127578
VAR007	0.212176	-0.24729	0.103038	0.165836	-0.07084
VAR008	0.25001	-0.25207	-0.13262	0.298383	0.202035
VAR009	-0.01982	0.090226	-0.03611	0.065358	0.624324
VAR010	0.222142	0.022468	-0.01673	-0.11268	0.024053
VAR011	-0.06818	0.068646	0.31016	0.170206	-0.02972
VAR012	-0.14567	-0.02837	0.542591	0.039834	-0.03227
VAR013	0.137984	-0.01368	0.260563	-0.26468	0.140713
VAR014	0.040197	0.395385	-0.02701	-0.16296	0.069424
VAR015	0.128447	0.116443	-0.01733	0.123451	0.006157

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 Component Scores.

The factors affecting attitude towards the Value Added Tax system are summarised below.

Table: 4.3.41 Factors Affecting Attitude Towards Value Added Tax

	1 st factor	2 nd factor	3 rd factor	4 th factor	5 th factor
Variables	1	4	2	3	9
“	5	14	11	8	-
“	6	-	12	-	-
“	7	-	13		-

FACTOR I

Convenience

Convenience in this case involves such variables as mode the payment, availability of money at the time payment, information and effect on production. Convenience factor has been observed in most cases. The tax system must therefore be reorganised to address this problem

FACTOR II

COST

A good tax system must be economical. This factor has been observed in all other tax cases. Cost issues in VAT are identified as cost of process of ascertaining obligation. The other variable is deemed to be unrelated. There is need to assist taxpayers in reducing their cost of ascertaining the tax.

FACTOR III

Administrative efficiency

This is a broad factor in reality. In this case it has been observed as a factor with 4 variables. The administrative efficiency issues revolve around training taxpayers process of refunds and satisfaction with manner in which KRA deals with tax matters. This was the second most important factor.

FACTOR IV

Certainty

Certainty issues observed about this tax includes the knowledge of tax issue especially certainty of obligation and application of penalties to defaulters. This is another set of variables identified as influencing attitude towards VAT.

FACTOR V

Tax controls

This was a one variable factor. The variable therefore defines the factor. This factor is identified as the strictness of application of tax controls. As observed in many other instances there is need to have tight administrative controls so as to avoid or reduce tax evasion.

FACTORS AFFECTING ATTITUDE TOWARDS CUSTOM DUTY

Factor analysis reduced the variables into 5 factors as follows:

Table:4.3.44 Factors affecting attitude towards Custom duty

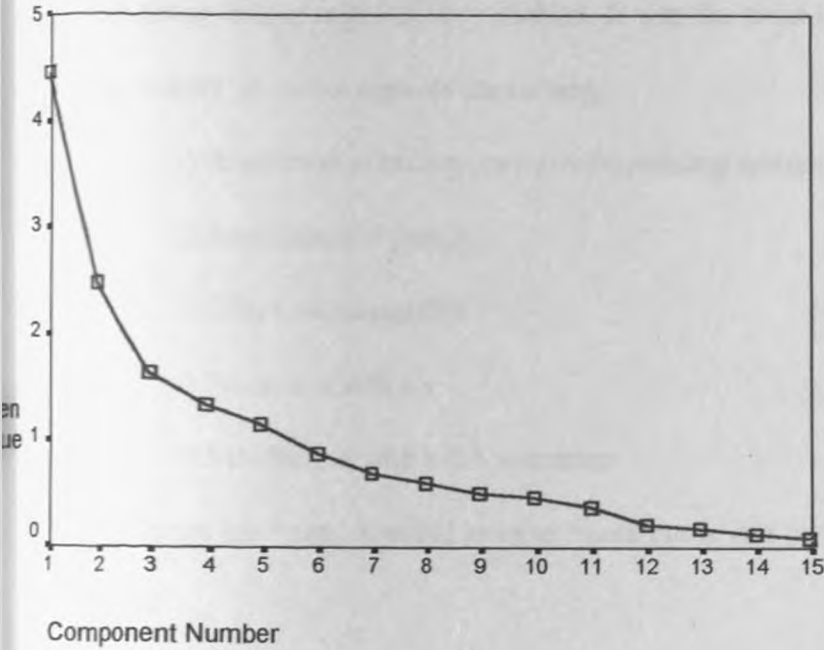
	1 st factor	2 nd factor	3 rd factor	4 th factor	5 th factor
Variables	6	1	3	2	14
“	9	5	4	6	15
“	10	7	-	-	-
“	11	-			-
“	12	-	-	-	-
“	13	-	-	-	-

Table 4.3.45 Eigen Values For Custom Duty

Total Variance Explained			
Initial Eigenvalues			
Component	Total	% of Variance	Cumulative %
1	4.439723	29.59816	29.59816
2	2.470123	16.46749	46.06564
3	1.622137	10.81425	56.87989
4	1.320252	8.801679	65.68157
5	1.147151	7.647671	73.32924
6	0.858495	5.723301	79.05254
7	0.675143	4.500953	83.5535
8	0.59728	3.981869	87.53536
9	0.48961	3.264069	90.79943
10	0.455502	3.03668	93.83611
11	0.37316	2.487734	96.32385
12	0.203551	1.357008	97.68086
13	0.172143	1.147619	98.82847
14	0.110488	0.736589	99.56506
15	0.06524	0.434937	100

Extraction Method: Principal Component Analysis.

Diagram 4.3.5 Custom Duty Factor Extraction by Scree Plot



These factors were identified as follows:

Table 4.3.46 Custom Duty Coefficient Matrix

Component Score Coefficient Matrix					
	1	2	3	4	5
VAR001	-0.10071	-0.06395	0.453485	-0.11598	0.105115
VAR002	-0.14163	-0.2175	-0.08036	0.503594	0.091676
VAR003	0.368621	-0.05251	-0.08842	-0.08867	0.051328
VAR004	0.391965	-0.11569	-0.03995	-0.00717	-0.12354
VAR005	-0.05579	-0.15435	0.361535	0.121383	-0.06253
VAR006	-0.18029	0.378624	0.121689	-0.14205	0.047697
VAR007	0.008981	0.08297	0.204731	-0.09013	-0.49088
VAR008	-0.10458	-0.02147	0.131238	0.238177	0.017403
VAR009	-0.11498	0.384546	-0.20109	0.036554	0.204152
VAR010	0.249904	0.326445	-0.16164	-0.12204	-0.06297
VAR011	0.099415	0.079883	0.107382	0.020404	-0.06036
VAR012	0.091554	0.103168	-0.07321	0.204244	-0.1217
VAR013	0.092007	0.060426	-0.04031	0.254974	-0.05128
VAR014	-0.05556	0.118031	0.091928	-0.03367	0.612413
VAR015	0.079243	-0.03207	0.110613	0.223686	0.240092

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 Component Scores.

FACTOR I

Administrative efficiency

This factor brings together six variables. It was the most important factor as deemed by the respondents. It involves issues concerning:

- 1) Assistance to tax payers on understanding system
- 2) Application of penalty
- 3) Effect on production
- 4) Process of refunds
- 5) Satisfaction with KRA operation.

This factor has been identified in other taxes but in this particular case, it seems to be heavily loaded.

FACTOR II

Convenience

In this case the three variable of convenience were brought together under one factor. These variables include timing and mode of payment. Timing is also confirmed by a supplementary of availability of money when paying a tax. Convenience is a factor identified in all other taxes showing how important it is to taxpayers.

FACTOR III

Cost

The cost of ascertaining the tax obligation is identified as another principal factor. The cost issues involved here include the cost of hiring experts. The two variables 3 and 4 are related in the sense one is about seeking expertise assistance while the other is cost of the system.

Where expertise from the market is sought to solve tax problem then the system becomes expensive.

FACTOR IV

Administrative controls

These are controls put in place to ensure that there is no tax evasion. Variable two seems to be unrelated to this factor. The main element in factor 4 therefore is administrative controls put in place.

FACTOR IV

Certainty of tax

The certainty element involved in this factor includes understanding what the system involves. These were captured by variables 14 and 15. It includes understanding the objectives of the tax and rules and regulations governing the tax.

FACTORS AFFECTING ATTITUDE TOWARDS EXCISE DUTY

Excise duty is a tax paid by organisations manufacturing goods. Most of the respondents did not fall under the category of those who pay this tax. As a result there is tendency for the response to be the middle way score given that they will either agree or disagree.

To eradicate this problem the analysis is made with respect to respondent like industrial group, which is expected to be involved in paying this tax.

The factor analysis results show that data is reduced into 4 factors as follows:

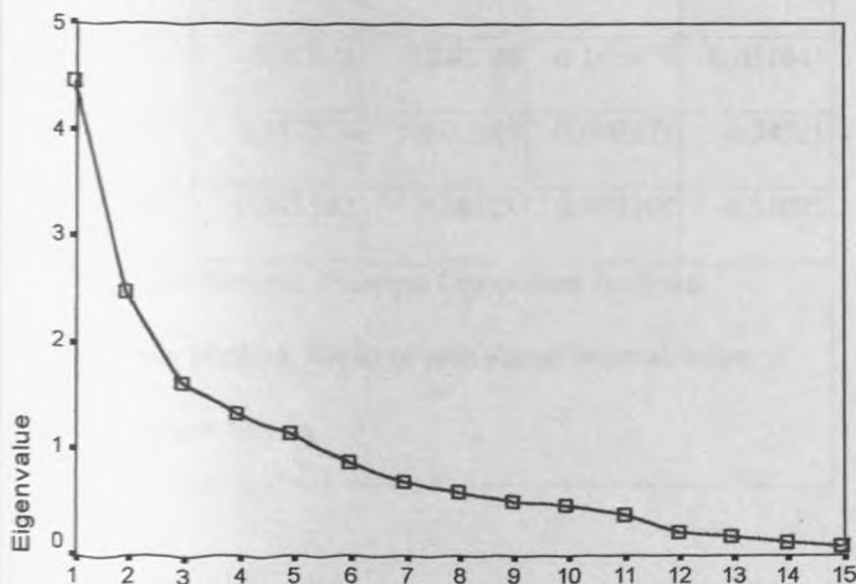
4.3.47 Eigen Values For Excise Duty

Total Variance Explained			
Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	4.861542	32.41028	32.41028
2	2.594829	17.29886	49.70914
3	1.496072	9.973813	59.68295
4	1.25601	8.373402	68.05635
5	0.941364	6.275761	74.33212
6	0.807723	5.384819	79.71693
7	0.67628	4.508535	84.22547
8	0.573605	3.824035	88.0495
9	0.486794	3.245292	91.2948
10	0.41069	2.737931	94.03273
11	0.302928	2.019518	96.05225
12	0.25921	1.728066	97.78031
13	0.188576	1.257171	99.03748
14	0.11168	0.744531	99.78201
15	0.032698	0.217987	100

Extraction Method: Principal Component Analysis.

Diagram 4.3.6 Excise Duty factor extraction by scree plot

Scree Plot



These factors were identified as follows:

Table 4.3.48 Excise Duty Score Coefficient Matrix

Component Score Coefficient Matrix				
	Component			
	1	2	3	4
VAR001	0.332686	-0.16893	-0.16278	0.145156
VAR002	-0.13115	0.315464	-0.00892	-0.07578
VAR003	-0.08407	-0.03656	0.438255	-0.15925
VAR004	-0.13815	0.014162	0.435783	-0.02065
VAR005	0.005421	-0.1418	-0.00793	0.389641
VAR006	0.049173	0.156556	-0.08082	0.095776
VAR007	-0.09402	0.020783	-0.09659	0.449894
VAR008	0.314945	0.094584	-0.16377	-0.04249
VAR009	0.058594	0.300826	-0.06211	-0.19497
VAR010	-0.02638	0.077428	0.250311	0.015784
VAR011	0.114297	0.013604	0.059104	0.102177
VAR012	-0.13317	0.257069	0.185563	0.036738
VAR013	-0.02872	0.230378	0.105475	0.051041
VAR014	0.372264	-0.02985	0.005571	-0.34321
VAR015	0.245163	-0.00129	0.033709	-0.01085
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				
Component Scores.				

The factors identified are summarised as follows:

Table: 4.3.49 Factors Affecting Attitude Towards Excise Duty

	1 st factor	2 nd factor	3 rd factor	4 th factor
Variables	3	4	2	1
“	11	5	7	6
“	14	8	12	9
“	15	10	13	-

FACTOR I

CERTAINTY

The most important variables affecting the excise duties in this factor includes issues such as the purpose of the tax, the rules and regulations governing the tax, understanding important matters about the tax, and ascertaining ones obligations. Certainty has also been identified in all other taxes. It is important that the tax matters be clear to taxpayers.

FACTOR II

Convenience

The second factor identified is convenience. The variables in this category are 4,5,8, and 10

The convenience issues pointed out are cost of ascertaining the tax, mode of paying the tax and effect on production. The third variable (8) seems to be unrelated and is captured under tax controls.

FACTOR III

ADMINISTRATIVE EFFICIENCY

This is the efficiency of the tax system as perceived by taxpayers.

It involves issues such as the process of refunds and satisfaction about manner in which KRA handles tax matters. It also includes the extra burden of cost that taxpayers feels are added to them by the tax system like the need for extra accounting records.

FACTOR IV

Tax controls

The last factor-affecting attitude on the Excise duty is tax controls. These are controls put in places by KRA especially controls on application of penalties. The variables specifically are concerned about the strictness of applying the controls. The other variables in this factor are less related to controls as to other factors identified about. Particularly variable 9 is an issue of convenience which is captured in other factors above.

4.3.9 SUMMARY AND CONCLUSION PART III

Factor analysis identified the factors affecting attitude towards the tax system generally and each of the tax in particular. Generally the factors seem to be common and include:

- 1) Certainty
- 2) Convenience
- 3) Administration efficiency
- 4) Cost
- 5) Application of controls

These factors influence taxpayers attitude and of course behaviour. They point out weak areas that the KRA should address so as to improve on the tax payers attitude and eventually their behaviour. More important these elements have an effect on the extent of tax evasion in any economy. Therefore there is a need to address them, so as to improve on tax system image to taxpayers and eventually tax revenue production.

CHAPTER 5

5.0 DISCUSSIONS AND CONCLUSIONS

5.1 Introduction

The objectives of the study were three folds

- 1) Analysis of the revenue productivity of the tax system in Kenya.
- 2) Analysis of the factors determining productivity of system in Kenya.
- 3) Analysis of the tax payers attitude towards the tax system.

Objective No 3 was supplementary to objective No 2. It acted as a check to the factors revealed by the response by the tax authority.

To achieve objective No 1 the buoyancy and elasticity coefficient of the tax system were computed.

The analysis of the finding is provided in chapter 4.

5.2 SUMMARY AND CONCLUSIONS

The tax system in general has been found to be both elastic and buoyant for the period 1989-1998. The Excise duty was the most productive. The VAT was the least productive with responsiveness less than unity. The introduction of VAT to replace the sales tax has not improved productivity of the tax system. Compared to the previous periods, the tax system in the 1989-1998 was more productive whereby both buoyancy and elasticity coefficients were greater than one. All taxes except VAT indicated an improvement of responsiveness. The tax modernisation programme adopted by the revenue authority has greatly improved the productivity of tax system in Kenya.

In particular the tax modernisation program includes such policy changes as:

- 1) Introduction of VAT
- 2) Introduction of self assessment
- 3) Formation of Kenya Revenue Authority

The Kenya Revenue Authority was formed in 1995. The Buoyancy and elasticity of the tax system since its formation have been less than unity. The reason is probably due to the fact that the system is undergoing a transition and it must take some time before results can be seen.

The coefficient of Buoyancy and elasticity for the period 1989-1998 were 1.27 and 1.26 respectively. This is an indication that the tax system was able to keep pace with need to raise more revenue to meet the government expenditure. Discretionary measure had a very small effect on tax productivity as shown by the difference between the buoyancy and the elasticity. This implies that government had embarked on improving tax revenue through efficiency rather than raise in taxes rate and bases.

However it is observed that increase in tax revenue productivity is not full proof of efficiency per-se. Moreover the revenue authority must not relax but rather maintain the spirit. The next analysis reveals some areas that the tax authority needs to put into consideration to improve productivity in years to come. Factors affecting tax productivity were analysed through response to a questionnaire sent to the KRA and another to corporate taxpayers. The corporate tax payers questionnaire was sent to the finance directors.

The KRA questionnaire sought to find out whether the following measures have been put in place.

- 1) Locating tax payers through registration
- 2) Facilitating voluntary compliance.
- 3) Resolution of controversies between taxpayers and the officers
- 4) Collection of taxes
- 5) Application of tax penalties
- 6) Policies on employment.

Whereas each factor appeared to have been put in place, weakness was found in each one of them. However the KRA has taken steps to provide the entire mentioned factor and it was revealed that the process started in the last fiscal year 1997/98. The results show a positive progress but the period is too short to assess the effectiveness.

More work is required on the part of KRA to achieve the mentioned facts. In particular the revenue authority must.

- 1) Fully computerise information and ensure a common database through computerisation.
- 2) Enhance taxpayer education to include education in school and colleges on tax matters.
- 3) Provide informative advertisement on the need of tax.
- 4) Improve an audit examination through expanding the sample size taken and set taxpayers standards based on Business and size which will be compared with actual to see whether any deviation need examination
- 5) Set up a judicial system specialising with tax matters and particularly ensure establishment of training for tax judges and tax lawyers. Reliance on tax tribunal is not adequate.
- 6 Enhance machinery to deal with tax defaults by application of defaults.

7) Improve on tax authority employee's remuneration and also training to cope with new challenges such as technology.

8) Above all the revenue Authority should build up on data capacity through strengthening its corporate planning and research department. This should be done through more training and expansion of personnel.

Taxpayers attitude was analysed through results of questionnaire sent to taxpayers. The analysis was two fold, general tax system and specific tax system for income tax, withholding, and VAT custom and excise duty. The factor analysis method of the SPSS Version 7.5 was used.

The results of the analysis shows that tax payers generally have poor attitude towards the tax system. The attitude is not different among various sectors and sizes. There is need to improve this attitude by way of training, change of tax system and use of promotional activities.

The factors affecting the attitude identified to include:

- 1) Fairness
- 2) Application of controls
- 3) Information (certainty)
- 4) Use of tax revenue
- 5) Efficiency of administration.
- 6) Cost
- 7) Convenience

These factors are related to the factors observed from the analysis of the response by KRA.

They are factors that must be addressed to improve on the image of tax system to the taxpayers. A negative attitude towards the tax system discourages voluntary compliance and also encourages unorthodox method to evade tax. KRA has initiated steps to improve on the tax system. This is a very welcome idea, which will definitely go a big step in increasing tax revenue productivity. KRA is a young organisation it needs time to exact influence on the tax system and society in general. Given support it requires, there is a big hope for its success.

5.3 LIMITATIONS OF THE STUDY

The study was constrained by following factors:

- 1) The Revenue Productivity analysis used the proportional adjustment method to adjust for discretionary measures. The tax budget cannot fully capture the effects of discretionary measures on tax system.
- 2) The analysis of factors affecting tax system in Kenya used questionnaires sent to Kenya Revenue Authority and another to taxpayers. The questionnaire sent to Kenya Revenue Authority was not fully completed because of lack of data as well as problem of confidentiality. This set a limitation to analysis of some of the factors that were sought to be explained.
- 3) The taxpayer respondents were supposed to be a total of 54. Out of the total only 42 responded.
- 4) The tax payer response target was the corporate taxpayers who are already established. The attitude by the non-established firms could therefore not be known. Generalization is therefore constrained.
- 5) Limitation of measurement of attitude. Attitude changes over time and therefore respondents can give biased answers depending on the prevailing circumstances.

5.4 SUGGESTIONS FOR THE STUDY

The following areas are recommended for further studies:

- 1) An analysis of the tax system productivity using the other methods of capturing discretionary changes results should be done.
- 2) A study of the attitude of small-scale taxpayers should be done especially the non-established firms and the informal sector.
- 3) A study on the impact of Kenya Revenue Authority reforms like tax payers education and tax payers charter would reveal the benefits or otherwise of such policies.
- 4) Finally a study should be done on the extent of tax evasion in Kenya.

APPENDIX 1 : LETTER TO COMMISSIONER GENERAL (KRA)

THE COMMISSIONER GENERAL
KENYA REVENUE AUTHORITY
P.O. BOX 48240
NAIROBI

INTRODUCTORY LETTER: WANG'OMBE D.K.(D61/7104/97)

MR. WANG'OMBE DAVID KARUNGU is a masters student in the Faculty of commerce University of Nairobi. In Partial fulfilment of his Master of Business and Administration (MBA) he is conducting a study on "AN ANALYSIS OF THE REVENUE PRODUCTIVITY AND SOME ADMINISTRATIVE FACTORS OF THE TAX SYSTEM IN KENYA".

An analysis of some factors influencing Tax productivity is very important especially in Kenya at this time of need to improve on tax revenue collection. One of the principle aims of the research is to analyse some administrative factors that may require to be corrected in Kenyas tax system so as to improve on tax revenue collection.

Your organisation has been selected to form part of this study. To this end we kindly request your Assistance in completing the questionnaire which forms an integral part of the research. Any additional information you might feel necessary for this study is welcome.

The information and data required is needed for academic purposes and will be treated in strict confidence. A copy of the research will be made available to your organisation upon request.

Your co-operation will be highly appreciated.

Thank you.

Yours Faithfully,

Dr. Martin Ogutu
MBA co-ordinator

APPENDIX 2: LETTER TO TAXPAYERS

Dear respondent,

INTRODUCTORY LETTER: WANG'OMBE D.K. (D61/7104/97)

MR. WANG'OMBE DAVID KARUNGU is a masters student in the Faculty of commerce University of Nairobi. In Partial fulfilment of his Master of Business and Administration (MBA) he is conducting a study on "AN ANALYSIS OF THE REVENUE PRODUCTIVITY AND SOME ADMINISTRATIVE FACTORS OF THE TAX SYSTEM IN KENYA".

Your organisation has been selected to form part of this study. To this end we kindly request your Assistance in completing the questionnaire which forms an integral part of the research. Any additional information you might feel necessary for this study is welcome.

The information and data required is needed for academic purposes and will be treated in strict confidence. A copy of the research will be made available to your organisation upon request.

Your co-operation will be highly appreciated.

Thank you.

Yours Sincerely,
Dr. Martin Ogutu
MBA co-ordinator

Appendix 3: Taxpayers questionnaire

The following questionnaire is designed to help evaluate the administrative efficiency of the tax system in Kenya.

PART A

For each item indicate the extent to which you agree/disagree. Next to each item indicate by circling the appropriate number (1-5) which best describes your degree of agreement or disagreement as shown below.

circle 1 if you strongly disagree

" 2 if moderately disagree

" 3 if you neither agree nor disagree

" 4 if you moderately agree

" 5 if you strongly agree

- 1) Tax affairs require the company to employ a person in charge of Tax matters: 1 2 3 4 5
- 2) Reasons for which Government imposes taxes are well known: 1 2 3 4 5
- 3) The use to which Government puts tax revenue are well known: 1 2 3 4 5
- 4) The use to which the government puts revenue are beneficial to tax payers: 1 2 3 4 5
- 5) All citizens pay their taxes: 1 2 3 4 5
- 6) The legal consequences of not paying taxes are clear: 1 2 3 4 5
- 7) The imprisonment penalty for not paying tax

- is strictly applied by the Tax authorities: 1 2 3 4 5
- 8) The interest penalty for not paying tax
is strictly applied by the Tax authorities: 1 2 3 4 5
- 9) The penalty of fine for not paying tax
is strictly applied by the Tax authorities: 1 2 3 4 5
- 10) Penalties are levied to all tax defaulters: 1 2 3 4 5
- 11) People who fail to pay taxes bribe their way out: 1 2 3 4 5
- 12) Tax cases are processed without delay: 1 2 3 4 5
- 13) The tax system is not complicated: 1 2 3 4 5
- 14) There is fair treatment to all
citizens in tax Charges: 1 2 3 4 5
- 15) Tax authorities are always available to help in
case of any tax computation problems: 1 2 3 4 5
- 16) Tax revenue can be increased by better administration
without increasing rates or introducing new taxes: 1 2 3 4 5
- 17) Taxpayers are aware of their social responsibility
to the society: 1 2 3 4 5
- 18) Information on changes in the tax system
is conveniently communicated to tax payers: 1 2 3 4 5
- 19) There are no wealthy groups with enough
power to block tax measures levelled on them: 1 2 3 4 5
- 20) Tax authority provides simple explanations
of the tax system: 1 2 3 4 5

PART B

1) Please indicate the business type that your company belongs:

Tick as appropriate.

Agricultural	
Commercial and services	
Finance and investment	
Industrial allied	

2) Indicate the number of workers Employed by your company:

Tick as appropriate.

Less than 100	
101 - 500	
501 - 1000	
1,001 - 1500	
1,500 - 2,000	
2,000 and over	

3) Please indicate below the level of Turnover In Kenya Shilling of your company In the last

Financial Year:

Less Than 1000,000,000	
1000,000,001 - 2,000,000,000	
2,000,000,001 - 3,000,000,000	
4,000,000,001 - 5,000,000,000	
5,000,000,001 - 6,000,000,000	
6,000,000,001 - 7,000,000,000	
7,000,000,001 - 8,000,000,000	
8,000,000,001 - 9,000,000,001	
9,000,000,001 - 10,000,000,000	
10,000,000,001 and over.	

4) Indicate the level of Your Ordinary Shareholders Equity as per the last financial year. Tick as appropriate.

Less Than 500,000,000	
500,000,001 - 1,000,000,000	
1,000,000,001 - 1,500,000,000	
1,500,000,001 - 2,000,000,000	
2,000,000,001 - 2,500,000,000	
2,500,000,001 - 3,000,000,000	
3,000,000,001 - 3,500,000,000	
3,500,000,001 - 4,000,000,000	
4,000,000,001 - 4,500,000,000	
4,500,000,001 - 5,000,000,000	
5,000,000,000 and over.	

NB: ORDINARY SHAREHOLDERS EQUITY INCLUDES BOTH CONTRIBUTED CAPITAL AND RESERVES

PART C.

This part will analyse the different tax types that your company is involved in paying or remitting in case of withholding tax. The table provided in the next page has space to fill in your response for items 1 - 15 with respect to each of the taxes shown.

For each item indicate in the space provided the extent to which you agree/disagree. Next to each item Indicate by writing the appropriate number (1-5) which best describes your degree of agreement or disagreement as shown below.

Write 1 if you strongly disagree

" 2 if moderately disagree

" 3 if you neither agree nor disagree

" 4 if you moderately agree

" 5 if you strongly agree

NOTE:

"KRA" means Kenya Revenue Authority.

"V.A.T" means Value Added Tax

"W/holding Taxes" means Withholding Tax which includes Pay As Your Earn Remitted for employees, and both Tax on Interest and dividends remitted.

QUESTION**RESPONSE**

	Corporate Tax	W/holding Taxes	V.A.T	Custom /Import Duty	Excise duty
1) The time for paying the tax is convenient:					
2) A separate set of accounting records is required for purposes of the tax:					
3) Ascertaining the tax obligation does not require the help of Tax experts(like Accountants or Tax consultants):					
4) The whole process of ascertaining the Tax obligation is not expensive:					
5) The mode of paying the tax is convenient:					
6) Tax authorities are willing to help in case of tax computation problems:					
7) The tax is required to be paid at time tax payers have the money to pay:					
8) The tax system is so strict that tax payers cannot evade the tax:					
9) The Tax authorities strictly applies penalties on tax defaults:					
10) The tax does not discourage production:					
11) The KRA trains tax payers on important matters of the tax:					
12) Any tax refunds are processed expediently:					
13) Tax payers are satisfied with the manner in which KRA deals with the tax affairs:					
14) The objective of the tax is to develop the economy:					
15) The rules and regulations of the tax are easy to follow:					

THANK YOU FOR YOUR CO-OPERATION

Appendix 4

TAX ADMINISTRATION QUESTIONNAIRE

1. Do you have a register of taxpayers?

Yes	No

If yes, indicate the number of:

a) Registered Income Taxpayers other than PAYE.....

b) Registered salaried Income Taxpayers(i.e.PAYE).....

c) Registered Persons /businesses responsible for withholding the following tax:

(i)PAYE

(ii) Tax on Dividend.....

(iii)Tax on Interest.....

d) Registered Persons/Business required to Remit Value Added Tax.....

NB. PAYE stands for Pay As You Earn

2. Do the registers include all Persons/Businesses liable to pay/remit the Tax in Kenya?

Yes	No

If not Briefly explain why

.....

.....

.....

.....

.....

3. At what interval are the Registers updated? Tick as appropriate.

Monthly	
Semi-annually	
Annually	
Any other specify	

4. In what form do you maintain the register?
Tick as appropriate

Manual	
Computerised	
Partly manual and partly computerised	

5. What information of the tax payer/Tax Remitter (say Name, Location , PIN etc.) do you include in the register.

.....

6. Do you ascertain the correctness of the register by comparing with other authoritative registers (like; Register of companies, Register of properties, Register of voters, Membership of trade and other associations etc.)

Yes	No

If yes Please specify the sources used to compare the registers mentioned above and the location (i.e. organisation and address) of such sources.

Source used for Comparison	Location of the source
-------------------------------	---------------------------

.....
.....
.....
.....
.....

7. Do you provide simple explanations of Tax structure/system to help the lay people understand the Tax matters?

Yes	No

8. Do you have any other system of making Taxpayers understand their Tax matters?

Yes	No

If yes please specify.

.....

9. Tick as appropriate the media you use to avail Tax return forms to taxpayers.

Tax offices.	
Mailing.	
Local agencies.	
Any other, specify.	

10. Are the returns distributed to taxpayers at a fee.

Yes	No

11. Where returns are sent to taxpayers how do you choose the persons to whom the returns are sent?

.....

12. Which of the following media do you use to publicise tax matters.

Radio	
Television	
Newspapers	
Journals	
Others specify	

13. Which among the following tax return forms matters do you publicise? Tick as appropriate.

i) There is no excuse for failure to file a return	
ii) Where to collect Tax return forms	
iii) When to pay tax	
iv) Matters concerning Tax changes	
v) Any other (specify)	

14) Is the possibility of tax policy abuse anticipated?

Yes	No

15) Are there measures put in place to block possibility of tax policy abuse.

Yes	No

If Answer to question 15 above is yes, please indicate the measures you have put in place to block Possibility of tax policy abuse.

- a)
- b)
- c)
- d)

16. Do you receive returns from all of the Taxpayers on register?

Yes	No

17. Are the instructions on how to File Return Written clearly for the Taxpayers?

Yes	No

18. Are there instances that Tax payers do not meet the Returns instructions?

Yes	No

If Yes, Please name the instructions not met and factors that causes failure to Meet instructions?

Return forms Instruction not met by tax payers	Factors that cause failure to meeting return instructions

19. Do you ensure that the return forms are adaptable to both hand written and printed form?

Yes	No

20. Are there tax offices in place to assist Tax payers fill their No returns in every way possible?

Yes	No

21. Do you capture areas of filing returns that are problematic to tax payers?

Yes	No

If yes Please indicate below Problems That have been identified in the Past.

-
-
-
-
-

22). How have the problems above been addressed?

.....

23). Is there school education on how to file returns especially to children whose parents are illiterate?

Yes	No

24). Do you provide Persons /Businesses responsible for withholding tax with the necessary information for withholding?

Yes	No

25). Are tax returns data compared with expected standards (budget)?

Yes	No

If yes, are returns with deviation subjected to in-depth analysis?

Yes	No
-----	----

26). Please indicate the results of The in-depth analysis as shown;

--	--

INCOME TAX

Year	Total Number of returns with deviation	Number of Returns subjected to in-depth analysis	Action taken on the balance of returns
1989			
1990			
1991			
1992			
1993			
1994			
1995			
1996			
1997			
1998			

VALUE ADDED TAX

Year	Total Number of returns with deviation	Number of Returns subjected to in-depth analysis	Action taken on the balance of returns
1989			
1990			
1991			
1992			
1993			
1994			
1995			
1996			
1997			
1998			

EXCISE DUTY

Year	Total Number of returns with deviation	Number of Returns subjected to in-depth analysis	Action taken on the balance of returns
1989			
1990			
1991			
1992			
1993			
1994			
1995			
1996			
1997			
1998			

27). Are tax returns sampled for an in-depth analysis (whether with deviation from standards or not).

Yes	No

28). How is the sample in Number 27 selected? Tick as appropriate.

Random	
Systematic	
Cluster	
Stratified	
Judgmental	
any other specify	

29). Please indicate the results of the In-depth analysis Mentioned above in question 25.

INCOME TAX

Year	Tax declared on sampled returns	Tax collected after in-depth study
1989		
1990		
1991		
1992		
1993		
1994		
1995		
1996		
1997		
1998		

VALUE ADDED TAX

Year	Tax declared on sampled returns	Tax collected after in-depth study
1989		
1990		
1991		
1992		
1993		
1994		
1995		
1996		
1997		
1998		

EXCISE DUTY

Year	Tax declared on sampled returns	Tax collected after in-depth study
1989		
1990		
1991		
1992		
1993		
1994		
1995		
1996		
1997		
1998		

30). Is the Taxpayers register compared and matched against the returns received to reveal any failures to file return?

Yes	No

31). Please indicate below the number of failures to return as Revealed from comparison with the Tax Register.

Year	Income Tax		VAT		Excise Duty	
	Returns Filed	Failures to file	Returns Filed	Failures file	Returns Filed	Failures to File
1989						
1990						
1991						
1992						
1993						
1994						
1995						
1996						
1997						
1998						

32). Are there problems encountered in tax assessment and administration on taxpayers?

Yes	No

33). If yes, Please show (by numbers 1,2,3... where 1 represents least value) the order of importance of the factors that may be hindering your ability to assess the tax payers obligation.

Records kept by tax payers	
Availability of qualified Accountants/personnel.	
Political influence of tax-payers	
Others specify	
-	
-	
-	

34). Do you have authority to obtain tax payers information from other institutions like banks, insurance companies, stock brokers etc. (i.e. Statutory Investigation)

Yes	No

35). Please indicate the number of taxpayers subjected to statutory investigation for the 1989 to 1998

Year	Income Tax	VAT	Customs Duty	Excise Duty
1989				
1990				
1991				
1992				
1993				
1994				
1995				
1996				
1997				
1998				

36). Please indicate the qualification necessary (Academic or otherwise) for one to be a member of the Tax tribunal

.....

37). Are there specialised Tax courts in Kenya employed to deal with tax matters?

Yes	No

38) If yes please indicate the name and location of the courts

.....

39). Are there specialised Tax judges who concentrate on just but tax cases?

Yes	No

- 40). For each of the years 1989-1998 indicate the number of cases brought to court and resolved in the year of filing .

Year	Cases Pending at beginning of year	New Cases brought to court	Cases resolved in the year of filing	Previous years Cases resolved in the Year
1989				
1990				
1991				
1992				
1993				
1994				
1995				
1996				
1997				
1998				

41. Please indicate the amount of taxes declared delinquent as shown.

Year	Income Tax	Tax declared Delinquent Value Added Tax	Customs Duty	Excise Duty
1989				
1990				
1991				
1992				
1993				
1994				
1995				
1996				
1997				
1998				

42. Please indicate the formal demands made on Delinquent taxes and amounts collected out of the demand.

INCOME TAX

Year	Formal demands made	Amounts collected out of formal demands
1989		
1990		
1991		
1992		
1993		
1994		
1995		
1996		
1997		
1998		

VALUE ADDED TAX

Year	Formal demands made	Amounts collected out of formal demands
1989		
1990		
1991		
1992		
1993		
1994		
1995		
1996		
1997		
1998		

CUSTOM DUTY

Year	Formal demands made	Amounts collected out of formal demands
1989		
1990		
1991		
1992		
1993		
1994		
1995		
1996		
1997		
1998		

EXCISE DUTY

Year	Formal demands made	Amounts collected out of formal demands
1989		
1990		
1991		
1992		
1993		
1994		
1995		
1996		
1997		
1998		

43) For The delinquent taxes indicate the number subjected to sanctions as shown.

Year	No. Of delinquent Tax-payer	Number of delinquent tax payers subjected to:			
		Lien of Property	Distrainment of property	Garnishment Wages	Any other Specify
1989					
1990					
1991					
1992					
1993					
1994					
1995					
1996					
1997					
1998					

44) For each of the years 1989 to 1998 indicate the number of tax defaulters

Year	Number of Tax Defaulters			
	Income Tax	Value Added Tax	Customs Duty	Excise Duty
1989				
1990				
1991				
1992				
1993				
1994				
1995				
1996				
1997				
1998				

45) Indicate The number of tax defaulters subjected to the Penalties as follows:

INCOME TAX

Year of default	Tax payers subject to:			
	Interest	Fine	Imprisonment	Others Specify
1989				
1990				
1991				
1992				
1993				
1994				
1995				
1996				
1997				
1998				

VALUE ADDED TAX

Year of default	Tax payers subject to:			
	Interest	Fine	Imprisonment	Others Specify
1989				
1990				
1991				
1992				
1993				
1994				
1995				
1996				
1997				
1998				

CUSTOM DUTY

Year of default	Tax payers subject to:			
	Interest	Fine	Imprisonment	Others Specify
1989				
1990				
1991				
1992				
1993				
1994				
1995				
1996				
1997				
1998				

EXCISE DUTY

Year of default	Tax payers subject to:			
	Interest	Fine	Imprisonment	Others Specify
1989				
1990				
1991				
1992				
1993				
1994				
1995				
1996				
1997				
1998				

46) Please Indicate the Composition of employment for each of the department as Shown

	Income Tax	VAT	Custom Duty	Excise Duty	Others
Non-Graduates Professionals					
Graduates Professionals					
Graduates Non- Professionals					
Post-Graduates Non-Professionals					
Post-Graduates Professionals					

NB: Professional means Member of Professional Bodies like ICPAK

Graduate means Person with first degree

Post - graduates means Person with postgraduate degree or diploma.

47) Please indicate the Distribution of workers In terms of Monthly Income as shown:

Monthly Class Kshs.	Income	Number of Workers			
		Income Tax	Value Added Tax	Custom Duty	Excise Duty Others
0 - 10,000					
10,001 - 20,000					
20,001 - 30,000					
30,001 - 50,000					
50,001 - 100,000					
100,001 and over					

THANK YOU FOR YOUR CO-OPERATION

*****END*****

APPENDIX 5

BUDGETED TAX REVENUE CHANGES

FIGURES IN MILLION K£

	Income Tax	V.A.T	Custom Duty	Excise Duty	Others
Year ending					
89/90	5	9	10	31	3
90/91	6	52.2	-32	25.5	1.7
91/92	-13.18	-48.81	-16.36	142.11	-24.76
92/93	-30.8	46.4	95.3	3	2.1
93/94	74.7	47.3	69.2	58.9	15.2
94/95	30.6	28.3	126.4	15.7	11
95/96	91	-13.3	-10	17.4	65
96/97	15.1	51.2	-1.8		63.5
97/98	-1.1	32.7	-59.5	61.9	36.9
98/99	-5.5	104.6	10.9		15.3

Source: Budget speeches, Various issues.

NB: In 1999 custom duty includes excise duty

In 1997 V.A.T includes excise duty (For each of the cases the budget taxes were split on basis of actual revenue collected)

Appendix 6

ACTUAL TAX REVENUES FROM 1989/90 TO 1998/99

FIGURES IN MILLION K£.

Year	Income tax	Custom Duty	V.A.T	Excise duty	Others
1989	512025	300279	588284	137446	106434
1990	599153	347968	640345	149358	93813
1991	713084	334680	766071	185164	103811
1992	853395	255939	927770	340460	100238
1993	998525	459150	1107136	418355	87547
1994	1838365	739639	1449717	556267	120046
1995	2175290	929910	1226690	966610	107030
1996	2404120	1058780	1420100	1130590	123590
1997	2418750	1129700	1492500	1464630	123650
1998	2840260	1197490	1545750	1464630	153210

SOURCE STATISTICAL BULLETIN, DEC 1998:

MONTHLY ECONOMIC REVIEW, MARCH 1999:

STATISTICAL ABSTRACT VARIOUS ISSUES

APPENDIX 7

ADJUSTED FOR DISCRETIONARY CHANGES

	Income Tax	Custom Duty	V.A.T	Excise Duty	Others
89/90	511.675	298.629	564.184	127.546	98.249
90/91	593.746	336.110	605.480	109.832	83.829
91/92	700.704	354.186	675.003	117.411	91.315
92/93	849.564	288.168	860.488	125.77	109.867
93/94	1029.325	363.85	1060.736	415.355	85.447
94/95	1814.153	531.285	1343.644	493.803	102.500
95/96	2144.69	803.51	1198.39	950.91	96.03
96/97	2280.581	923.503	1400.331	1095.109	52.568
97/98	2280.135	986.932	1446.282	1394.063	26.009
98/99	2678.526	1098.136	1466.196	1335.145	24.2

APPENDIX 8 : BIBIOGRAPHY

- Bird, R.M. and Oldman, O. (1964); Readings on Taxation in Developing Countries. Baltimore John Hopkins press. 2nd edition.
- Encyclopedia Britannica (1974) Helen Hemingway Benton. London 15th Edition .Vol.17
- Ghai,D.P. (1966); Taxation For Development A Case Study of Uganda, East African Publishing House, Nairobi
- Gobin, R.T. (1978); "An Analysis of the System of Taxation in the Carribean Common Market". Journal of Public Finance, Vol. 35.
- Herschell, F.J. (1978); "Tax Evasion And Its Measurement in Developing countries". Readings on Taxation In Developing Countries. Baltimore John Hopkins press. 2nd edition.
- Kariuki, N.(1978); Fundamentals of Income Tax. Medi-Teki, Nairobi.
- Kusi, N.K.(1998); "Tax Reforms And Revenue Productivity In Ghana". Africa Economic Research Consortium, Nairobi No. 74.
- Mansfield, C.(1972); " Elasticity and Buoyancy of a Tax System a Method Applied to Paraguay." International Monetary Fund Staff Papers. Vol. XIX No.2.
- Musgrave, R.A. & Musgrave,P.B.(1989); Public Finance in Theory and Practice, 5th Edition, Mcgraw hill Book Company. Newyork.
- Musgrave, R.A. (1959) The Theory of Public Finance Mcgraw hill book company. New York.
- Mwanzia , J.M. (1996) The Impact of Tax Reforms On Bouyancy and Elasticity of The Tax System in Kenya. University of Nairobi, M.A. Thesis.
- Njoroge, J.W.(1993); " Revenue Productivity of the Tax Reforms in Kenya 1972/73-1990/91 ". University of Nairobi, M.A. Thesis.
- Nzioki, S.M. (1994); Tax payers Rescue, From Income Tax to PIN . Tax Publishers LTD Nairobi.
- Ochumbo, A. (1982); "An Analysis of Selected Amendments in the Income Tax Act in Kenya in light of the Efficiency Criterion of Equity" . Unpublished MBA Project University of Nairobi.
- Ole, A.M (1973); " Income Elasticity of Tax Structure in Kenya 1962/1963- 1972/73". University of Nairobi, M.A. Thesis.
- Point (1998) Bulletin of Institute of economic affairs. July, Issue no.22
- Prest,A.R.(1961); Public Finance In Theory And Practice, Weidnefeld and Nicolson. London

Smith, A. (1776); Wealth of Nation, Everymans library, London.

Sommerfold R.M.; Anderson,H.M. & Brock, H. (1980):

An Introduction To Taxation. Harcourt Brace Jovavich. New York.

Srivinivasio, T.A. (1973); "Tax Evasion: Models" Journal of Public Economics.

Strader, J.S. and Fogliassio C.E. (1989) " An Investigation of Some of the Factors Affecting
Tax Non-compliance." Journal of Public Finance, vol. 25.

Surrey, S.S.(1964) "Tax Administration in Underdeveloped Countries." Readings on
Taxation in Developing Countries. Baltimore John Hopkins Press. 2nd Edition.

Taylor, N. C. (1970); "Income Tax Administration and Policy in Nigeria," Readings on Taxation
Developing Countries. Baltimore John Hopkins Press. 2nd Edition.