THE EFFECT OF TAX EVASION ON TAX REVENUES IN KENYA

BY

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DECLARATION

I declare that this research project is my original work and has not been submitted to any other University or institution of higher learning for academic award purposes.

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This research project has been submitted with my approval as the university Supervisor.

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DEDICATION

I dedicate this work to my family members, friends and the entire academic staff for their moral, financial and spiritual support towards my life throughout my career. May the almighty God reward them for me.

ABSTRACT

Tax payment is a civic duty and an imposed contribution by the government to contribute to her principal source of revenue to provide public goods and services to its citizenry. It is a compulsory unrequited payment to the Government. Tax evasion prevalence is vast and greatly impairs taxation's macro- economic objectives thus creating a gulf between actual and potential government tax revenue raising many issues which need urgent attention and solutions. However much the government endeavors to exercise its sovereign right to collect taxes, nobody likes paying taxes although there is great appreciation that taxes need to be paid and this drives some people into tax evasion making the government constantly fail to raise targeted tax revenue. The study sought to establish how tax evasion affects tax revenues in Kenya. The study employed a survey research design which involved collection of information from a sample of individuals through response to questions. The study targeted 50 tax evaders investigated by Kenya Revenue Authority. The study relied on secondary data informed by KRA investigated cases, related materials published by government authorities, organizations such as Tax Justice Network, work of other researchers and authors in the form of journals, books, bulletins and newspapers articles as well as sources from the internet. The researcher used quantitative methods to quantify the problem by way of generating numerical data. A regression analysis was used to identify the effect of tax evasion on tax revenue. From the regression model, the study found out that there were factors influencing tax revenue in Kenya, which are total tax evasions, money supply, GDP per capita and exchange rate. They either influenced it positively or negatively. The study found out that the intercept was 0.861 for all years. The four independent variables that were studied (total tax evasions, money supply, GDP per capita and exchange rate) explain a substantial 74.2% of tax revenue in Kenya with equity as represented by adjusted R^2 (0.742). The study established that the coefficient for total tax evasions was -0.728, meaning that total tax evasions negatively but significantly influenced the tax revenue in Kenya. The study therefore concluded that tax evasion negatively but significantly affects tax revenue in Kenya. The study recommended that due to the potential negative effects of tax evasion on tax revenues in Kenya, new policy guidelines contained in the budget speeches and other tax policy documents should be implemented, as a matter of urgency, almost immediately.

TABLE OF CONTENTS

LIST OF TABLES

ABBREVIATIONS AND ACRRONYMS

EUT   Expected Utility Theory

FDI   Foreign Direct Investment

GDP   Gross Domestic Product

ICTD   International Centre for Tax and Development

KRA   Kenya Revenue Authority

PAYE   Pay As You Earn

PT   Prospect Theory

VAT   Value Added Tax

CHAPTER ONE

INTRODUCTION

1.1 Research Background

Tax payment is a civic duty and an imposed contribution by the government to contribute to her principal source of revenue to provide public goods and services to its citizenry. It is a compulsory unrequited payment to the Government (Margaret, 1992). Taxes do not bear any relationship to the benefits of government goods and services received (Hyman, 1990).

1.1.1. Tax Evasion

Tax evasion is an illegal deliberate misrepresentation of the true state of affairs by individuals and corporations to the tax in order to reduce their tax liability by methods that violate the provisions of tax laws. It is therefore an offence that could lead to imposition of criminal proceedings against the tax payer if discovered and has been in existence for a long time and therefore one of the greatest economic crimes facing many tax authorities and governments in the world at present.

1.1.2 Tax Revenue

Tax revenue refers to the amount of funds raised through taxation. Taxation is universally a major tool used by governments to promote economic growth and development by way of actualizing macro-economic objectives in areas of monetary and fiscal policies and therefore a compulsory transfer of money from individuals and institutions to the government. Tax system in Kenya has undergone more or less continual reform over the last twenty years. On the policy side, rate schedules have been rationalized and simplified, a new value-added tax introduced and external tariffs brought in line with

those of neighboring countries in East Africa such as Tanzania and Uganda. At the same time, administrative and institutional reforms have taken place making Kenya have trappings of a modern tax system, including, for example, a credit-invoice VAT, a PAYE individual income tax with graduated but arguably moderate rates, and a set of excise taxes focused on the usual suspects (alcohol, cigarettes, gasoline, etc.) However, with up to 70 percent of GDP produced and possibly as much as 75 percent of labor employed in the informal sector, the ability of the tax system to raise sufficient revenue with minimal distortions is severely circumscribed. In such an environment, raising around one-fifth of GDP in tax revenue is likely to impose very large distortionary costs on the economy. Continued reform of both the policy instruments and the administrative and enforcement capacity of the tax system are therefore imperative.

Over half of the world's population live in the urban settings and this is expected to rise to 70% by 2050 (UNHCS-HABITAT, 2009). The outcome of increased urbanization has been and increases to be a fundamental change in the social economic environment of human activities as it involves new forms of employment, economic activity and lifestyle. Across all countries over time, the level of urbanization is strongly correlated to the level of economic development and one defining feature though is that increasing poverty levels in the developing countries and environmental challenge continue to affect urbanization whose transition cannot be halted or reversed but in face of the emerging economic challenges based on increasing urbanization, the informal sector activities continues to stand tall and has over the years seen rapid growth of small scale trade in

Kenya that lack of adequate incorporation in the tax among other systems making it a good ground for tax evasion hence the interest of my study in this area.

The informal economy can hardly be ignored in Kenya with 35 percent of urban and 59 percent of rural households respectively involved in small businesses (UNHSP-HABITAT, 2006). In either setting, they produce and distribute basic goods and services in unregulated competitive market that lie outside the regulatory framework of the national or county governments. This sector is a permanent fixture of the country's development and although it continues to face all sot of challenges due to lack of proper definition and effective policy formulation, there is need for policy makers to appreciate the role that the sector is playing in job creation, poverty alleviation and economic growth.

1.1.3. Tax Evasion and Tax Revenue

For a clear understanding of the discussion on tax evasion, its impact on the government of Kenya revenue and the relationship to the rates of tax in Kenya, it is interesting and noteworthy to expound on the distinction between two terms that the difference is the thickness of a prison wall according to the former British chancellor of the exchequer Denies Healey. They not only confuse tax payers but also tax professionals at times. These are: tax evasion, and tax avoidance. The end result for both is to reduce tax payers' liability and therefore tax revenue collected by the Government but the clear distinction is that one is legal while the other is illegal.

Tax avoidance is a method whereby tax payers take full advantage of the loopholes in a country's tax laws to pay less tax than they are obligated to pay were it not for those very laws. Studies have shown that large corporations based in Kenya and high net worth individuals have taken advantage of the country's convoluted and outdated tax regime to rob the government of an estimated Sh100 billion (USD 1.1 billion) a year, tax justice network & action aid report (2012).

While Kenya's low and middle-class earners are struggling to comply with punitive taxes, the government has failed to scrap outdated tax holidays and incentives that cost billions of shillings each year and only benefit big companies. Some of the incentives that are granted by the government do not translate to more foreign direct investment and if repealed will undoubtedly provide an increased revenue stream. Despite Kenya's ambitious Sh1.6 trillion budgets for the 2013/2014 financial year, the Kenya Revenue Authority (KRA) is hard pressed to meet revenue targets. The burden has instead fallen on Kenya's middle and low-income earners.

According to 2012 International Centre for Tax and Development (ICTD) Annual Centre Meeting, from 11-13 December in Cape Town, South Africa that brought together tax administrators, researchers and civil society from 20 countries, both the government and private sector acknowledge that the presence of incentives and allowances do not necessarily guarantee the flow of foreign direct investment (FDI) into the country. Studies have also shown that other countries in Africa without tax incentives attract more FDI than Kenya. Kenya has carried on with unnecessary incentives for far too long even after several studies have proved their ineffectiveness and stands to gain significantly more revenue if blanket tax holidays and exemptions are removed. Tax exemption

regimes create manipulations in the system because some multinational companies that enjoy tax holidays for a number of years often change their names after the time has lapsed or move to another country making the government lose out on the tax.

Tax evasion on the other hand happens where the tax payer deliberately misrepresents the tax status to reduce or completely evade the rightful tax imposed on him by the government. It is said to have enormously expanded since its first systematic theoretical analysis by Allingham and Sandmo (1972) and therefore a phenomenon that is present in all societies using Government expenditures. For it to be enforceable it is worth noting that the perpetrator of the evasion act must have knowledge and an understanding that for a particular tax period he earned income of which tax was supposed to be paid and he same declared to the tax authority by filing tax returns but it was deliberately not done and the purpose was an attempt to beat the tax system. Tax evasion is also perpetrated by way of overstating the expenditure through including expenses or activities that do not relate to the tax period or the generation of income in order to declare low profit thus translating to lower taxes payable.

The emergence of underground economy that mostly deals with cash and reluctant on cheques, electronic funds transfer, credit and debit cards, does not issue invoices as claim for payment as well as not issuing receipts as confirmation of payment has led to the evolution of another category of tax evasion method since the whole system does not leave a trail of any transaction making it easy to evade tax and conceal the practice.

Tax evaders manage to remain one step ahead also by using services of well-heeled lawyers and auditors making the practice of using aggressive tax planning rampant in Kenya where companies and individuals are looking for all means possible to cut their

tax expenses. In some cases there are companies which are founded in Kenya, operate in Kenya and sell their products and services in Kenya but the same companies have shell companies registered in tax havens most of which have tax rates between 0 and 15% such as Bahamas, Samoa, Switzerland, Richard Murphy, Forbes (2010) where they shift their profits and Kenya loses out on revenue. KRA often takes corporations to court on counts of tax evasion but the companies are famous for using strong legal departments to tie up cases in protracted litigation battles that stretch across many years.

Transfer pricing which is a profit allocation method used to attribute a multinational corporation's net profit (or loss) before tax to countries where it does business is also emerging as another method used to evade tax. For example in late 2012, the Kenya Revenue Authority ruled that the Bangalore, India-based multinational used transfer mispricing to avoid paying the government of Kenya nearly US$11 million (EUR8 million) in corporate income tax, part of a larger set of tax that amount to a quarter of the firm's 2012 sales. All this in retrospect reduces Government income thus affecting the level and quality of public services that the Government is able to offer to its citizens.

As a result of individuals and corporations altering their tax payment patterns when they evade tax, there is likelihood of misallocation of resources. This puts unnecessary blame on the Government due to the struggle in balancing the distribution of revenue to provide services to law abiding citizens who contribute by way of honoring their tax obligations. This in most occasions creates a feeling of neglect resulting to industrial unrests and strikes among various sectors of the economy thus affecting the productivity.

Although there are various forms of taxes in Kenya such as excise duties, Export duty, Transport licensing fees, National Hospital Insurance Fund, National Social Security Fund that equally suffer tax evasion, for the purpose of this study, I shall concentrate on value added tax as well as income tax which are the two forms of taxes that contribute the highest level of income to the Government as well as paid by the largest group of tax payers across most sectors. This will provide a sufficient representation to determine the level of tax evasion and impact on government revenue.

1.1.4 Kenya Revenue Authority

KRA is an arm of the Government of Kenya incepted in 1995 bestowed with the responsibility of administering tax on behalf of the government. KRA operates under the Ministry of Finance and its run by a Board of Directors headed by a Commissioner General.

The Government through this autonomous revenue authority that is less vulnerable to political intervention has in an endeavor to eradicate the problem embarked on a number of measures that help detect and remedy the attempts of tax evasion by way passing legislations, tightening the administrative, financial processes and procedures. Although efforts have been made, the authority has not managed to eradicate this corrupt practice that has contributed to Kenya being one of the most corrupt countries in the world ranking 144 out of 158 (Transparency International (TI), 2005).

In an attempt to beat the system, those that participate in the crime are constantly devising new and tricky ways of evading tax that call for thorough and in depth investigation to ascertain leading to a cycle whereby time and again new methods of evading tax are devised and constantly the government keep reviewing tax laws,

introducing measures and financial systems such as the recently introduced *i* tax to curb the menace.

1.2 Problem Statement

Tax evasion prevalence is vast and greatly impairs taxation's macro- economic objectives thus creating a gulf between actual and potential government tax revenue raising many issues which need urgent attention and solutions. However much the government endeavors to exercise its sovereign right to collect taxes, nobody likes paying taxes although there is great appreciation that taxes need to be paid and this drives some people into tax evasion making the government constantly fail to raise targeted tax revenue. For instance the way the Kenya's tax system is designed, it is difficult to collect actual taxes from self-employed such as accountants, doctors, businessmen, consultants to mention just but a few as they blatantly refuse to pay by reporting losses or low profits than actual every year. Charles, K., Agnes, M and Dorothy, N. (2012) highlighted the influence of tax avoidance and tax evasion on creative accounting although the study did not clearly bring out the various methodologies used by tax payers on creative accounting.

Oyugi (2001) identified two types of informal sector activities in Kenya as coping strategies (survival activities) and unofficial earning strategies (illegality in business) but focused on the coping strategies only. This study detailed the methodologies used to evade tax particularly among traders in Kenya as well as evaluate the effectiveness of the measures put in place to curb the menace and recommend what more need to be done to provide a solution to the problem and increase Government tax revenue without increasing tax rates.

Tax evasion has since many years ago been very difficult to observe, Fisman and Wei (2001). This is evident in the fact that during the third century, many wealthy Romans buried their jewelry or stocks of gold coin to evade the luxury tax and homeowners in eighteenth-century in England temporarily bricked up their fireplaces to escape notice of the tax collector, Slemrod, (2007). The present generation is not left out in the tax evasion prevalence and in Kenya tax evasion by some has led to tax evasion by others thus largely impacting on the distribution of tax burden as well as public resources leading to increase in taxes and revenue loss which may in the long run grid the functioning of the public sector to a halt. Gemmell and Morrissey (2003) observed that, in seeking to identify how much tax each person pays, it is important to distinguish between the 'statutory incidence' (the legal liability to pay the tax) and the economic incidence which in practice is often the belief regarding who ultimately bears the burden of the tax. Tax evasion affects the ability of those legally liable for various taxes to shift these as traditionally assumed but does affect incidence but is difficult to incorporate.

Kenya is considered to be one of the most heavily taxed countries (Transparency International Report, 2005) and this perception amongst international investors has denied this country some very lucrative investment opportunities. The slow rate at which entrepreneurs are taking up the investment challenges and opportunities created by our government warrants urgent attention to the reasons behind the high rates of tax in this country. It may very well be true that the country has failed to attract the investments due to high rates of taxation, in which case, it will be important to establish whether tax evasion causes the rise in tax rates and vice versa and what need to be done to provide a solution.

Some individuals and corporations' form non-profit making organizations inform of religious institutions or foundations that they make donations to report less profits in an attempt to evade tax. The informal sector is also prone to a lot of tax malpractices where individuals and corporations deliberately under cast figures, insist on cash payments and don't issue receipts or only issue cash sale receipts giving them the advantage of choosing where to bank the money and in most occasions in individual bank accounts thereby reporting low sales and eventually lowering the amount of tax they are eligible to pay. This makes it interesting and prompted the researcher to investigate the effect of tax evasion on tax revenue in Kenya without increasing revenue or reducing expenditure.

1.3 Research Objectives

The primary goals that the study sought to achieve are;

1. To investigate how taxes are evaded in Kenya.

2. To examine the effects of tax evasion on tax revenues in Kenya.

3. To identify measures to control tax evasion.

4. To ascertain whether there is a relationship between tax evasion and rates of tax.

1.4 Research Questions

Below are some of the key questions that guided the researcher in the course of the study.

1. Why do traders and businesses evade tax in Kenya?

2. How do traders and businesses evade tax in Kenya?

3. What measures need to be put in place to curb tax evasion in Kenya?

4. What are the economic costs of tax evasion in Kenya?

1.5 Value of the Study

Revenues from Income Tax and VAT form an important part of the total income collected by the government of Kenya to finance public services to its citizens. Any form of tax evasion reduces this revenue and impacts largely on the government's ability to provide services to the citizens. In its endeavor to raise sufficient funds, the government increases the rates of tax and widens the tax bracket, thereby increasing the tax burden to the compliant taxpayers and this even causes further tax evasion. This study is reasonable on the basis that it is expected to be of great benefit to various stakeholders in varying ways as discussed below.

Tax officers: As charged with the responsibility of ensuring that tax payers are not negligent in paying their taxes, the study will help them identify with ease the methods that individuals and businesses use to evade tax and how they attempt to conceal the vice from the authorities as well understanding what motivates them and how they can intervene to mitigate the practice.

Researchers: For those in the area of tax evasion, related areas and academia at large, the study having spelt out in an elaborate way tax evasion and its impact on the government revenue in Kenya will serve as a good ground for theory development as no exhaustive study can be carried in this wide area and will also help in expanding knowledge on how taxes are evaded by traders and further their understanding on how tax payers evade tax and what related areas need further research.

Government: Through its revenue collection authority, Kenya Revenue Authority, adequate upraising of the reasons and methods will help ascertain the level of tax evasion

in the various sectors, its impact on tax revenue and inform the necessary interventions to streamline tax administration, eliminate evasion and increase revenue in the public coffers without necessarily increasing taxes or reducing spending.

Students: the study will act as a valuable reference point to students of accounting, finance and other areas as well as serve as a guide to policy makers and act as an informative tool to any other party interested in expanding knowledge in the area of tax evasion.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The purpose of the study was to establish the effect of tax evasion on tax revenues in Kenya. This chapter presents the theoretical and empirical literature review. The theoretical review covers the concepts and theories of tax evasion. The empirical deals with documented work on tax evasion

2.2 Theoretical Review

This chapter examines some related literature on previous works done on related studies and looks at the thematic areas stated in the objective. Theories try to help one understand the problem and make it known what views other researchers have from a global perspective.

Globally, it is the responsibility of the government to facilitate the provision of essential public services such as health, education, security, foreign affiliations, and infrastructures such as roads, railways, seaport, and airports to her citizens. Most governments raise a bigger proportion of their income from taxation making raising revenue to finance government expenditure, redistribution of wealth and income to promote the welfare and equality of the citizens and regulation of the economy to create an enabling environment for the business to thrive the primary objectives of taxation, Lymer and Oats (2010). The other sources of governments' income include fines, grants, borrowing.

2.2.1 The underground economy

The origin of writings in 'underground' economics dates from 1971 when the term 'informal economy' was used by Keith Hart in a study on the economy of Ghana.

There has been growing concern about the expanding underground economic activities and how these activities affect economic policies, Tanzi and Shome (1993). Acts of corruption by tax collectors often play a role in promoting or sustaining underground economic activities and in facilitating tax evasion therefore contributing to undermining the legitimacy of a government and disrespect for other laws other than tax laws by the citizens. The development of the underground economy in Kenya cannot be ignored when matters of tax evasion is being discussed. Underground economy consists of economic activities carried out in an illegal manner e.g. smuggling goods into the country, engaging in selling prohibited goods, counterfeiting. This is currently on the increase especially among small scale traders who conceal it through engaging in legal trade while practicing the illegal trade in the background.

Together with the underground economy, there is the informal sector 'Jua-kali' sector which started originally as an avenue for skilled but unemployed persons making goods for sale or providing services directly to consumers without keeping any record of the monetary value of the transactions. Generally, the unorganized sector may evade taxes much more easily that the organized sector with small scale traders remaining very difficult to tax thus maintaining a constant presence in the list of administration concerns of most governments and tax authorities. The result could well be an increase in tax rates or the imposition of distortive taxes thereby initiating a vicious cycle of inequity and inefficiency, Shome (2005). Although the artisans were mainly drawn from poor echelon of the society eking a living in this manner, the sector has grown to a level where it now accounts for a substantial proportion of our industrial production and provision of skilled manpower in fields like motor vehicle mechanics and auto-electricians who make much

more money than salaried employees who are subjected to tax by way of pay- as- you-earn system of tax.

The adage that cheating is habit-forming has been proved correct within the small scale trading and the 'jua kali' sector, and by the habits of the underground economy. Both have become accustomed to evading taxation and are likely to continue to do so even if tax rates are reduced to the minimum. Since the underground economy thrives on cheating as far as income tax and VAT are concerned, there is a real danger that the formal businesses currently paying these taxes may be forced into cheating in order to remain competitive.

2.2.2 The Economics of Crime Model

The theory was developed by economist Gary Becker in 1968 when working on the problem of how to stop criminals from committing crimes and whether stopping crime is even desirable.

The basic theory used in nearly all compliance research builds on 'the economics of crime model' was first applied to tax compliance by Allingham and Sandmo (1972). According to Osoro Nehemiah (1995) a rational individual maximizes the expected utility of the tax evasion gamble, balancing the benefits of successful cheating against the risky prospect of detection and punishment. This approach concludes that compliance depends purely on audit verifications and the severity of penalties handed out to culprits. The model gives the sensible result that compliance depends upon enforcement and it is straightforward to show with comparative analysis that declared income increases with an increase either in the probability of detection, penalty rate and frequency of audit and verification.

15

However, it is clear to any observer that compliance cannot be explained entirely by such purely financial considerations especially those generated by the level of enforcement considerations. A purely economic analysis of the evasion gamble suggests that most rational individuals should either underreport income not subject to source withholding or over claim deductions not subject to independent verification because it is extremely unlikely that such cheating will be caught and penalized. The levels of audit and verification and penalty rates may be high, but other factors such as corruption actually allow many taxpayers to take the gamble, as they are likely to get away with it.

2.2.3 Prospect Theory

The theory was developed in 1979 by the psychologists Daniel Kahneman and Amos Tversky. It states that "Decision making under risk can be viewed as a choice between prospects or gambles." Decisions subject to risk are deemed to signify a choice between alternative actions, which are associated with particular probabilities (prospects) or gambles.

If fines are imposed on evaded tax and if tax payers' preferences satisfy the (theoretically and empirically plausible) assumption of decreasing absolute risk aversion, then the Expected Utility Theory (EUT) model of tax evasion predicts a negative relationship between tax rates and tax evasion (Yitzhaki, 1974). Owing to lack of empirical support and its counter intuitive nature, the negative relationship between tax rates and tax evasion predicted by the EUT model is sometimes termed as the "Yitzhaki paradox".

The Prospect Theory (PT) has become standard in behavioral economics for its able to resolve the many puzzles associated with EUT and provides a better fit to much empirical

data, Bruhin *et al* (2010). The theory has worked to reverse the Yitzhaki puzzle and applying the insights of PT to the tax evasion solves the puzzle.

The EUT model of tax evasion therefore predicts a decrease in tax evasion while tax rates increases. According to Trotin (2012), the Prospect Theory does not reverse the direction of the tax effect but certain choices of the reference level can affect the direction of the tax effect in some situations. When the reference level is exogenous, the PT diminishing sensitivity enables the reversal of the Yitzhaki puzzle but when the reference level is a decreasing function of the tax rate, PT typically ceases to reverse the Yitzhaki puzzle.

2.3 Empirical Review

This relates to work done by other researchers especially those studies relevant to one's topic of study. All modern contemporary societies are grounded on the compulsory payment of taxes. Charles, K. Agnes, M and Dorothy, N. (2012) did a study on tax avoidance and tax evasion as a factor influencing 'creative accounting practice' among companies in Kenya and found out that it is perpetrated through presenting false statements of accounts, making false entries or alterations, destruction of records, concealment of assets among others.

Sookram and Watson carried out a study in 2005 on tax evasion in developed and developing countries and pointed out that in developing countries, tax evasions tends to be more widespread since these economies are based on few large enterprises, less wealthy people, low tax morale, reduced opportunities to resort to tax evasion schemes and less use of tax practitioners.

According to Auriola and Warlters, (2005) tax revenue as a proportion to GDP is typically much lower in developing countries than in developed countries with direct

taxation representing 7% of GDP in sub-Saharan Africa and 22% in industrial countries. The different in tax revenues between the poorest and the richest nations is explained by weaknesses of direct taxation in developing countries

Jack Mintz did a study 2003 and the topic was income shifting and tax competition. He found out that tax incentives/holidays given to selected companies i.e. foreign direct investment or newly listed companies had the effect on opening an un-fair playing ground. He found out made other companies competing in the same industry result in tax evasion measures. This gradually impact negatively on the government revenue levels. In conclusion he said "though tax incentive was a good stimulant to the country's economic, they should be discouraged".

Levin Amaluka did a study in year 2001 titled: tax evasion in Kenya and Tanzania – evidence from missing imports. He found out that tax evasion was a factor that contributed to poor tax performance and as such detrimental to the country's economic growth and development agenda.

In conclusion he said "the government should invest in modern technological gadgets which can deter cases of tax evasion and smuggling of imports at the border points".

They concluded that tax is a major contributor of creative accounting and regulatory bodies therefore need to tighten the grip to curb creative accounting.

Howard in (1997) undertook a study to find out why taxes were introduced and the reasons why the rich tend to evade them more as compared to the middle class and the poor. The research found out that taxes were imposed mostly on the rich in an effort to share/redistribute the resources. However since the rich have the powers and the much needed influence or lobbying capacity, imposition of taxes on them led to more tax

evasion. This led to the scenario of taxing the whole population in order to attain the taxation canon of equality and capacity.

2.3.1 Determinants of Tax Evasion

The key determinants of tax evasion can broadly be categorized into three classes' i.e demographic determinants (age, gender, education and occupation status), economic determinants (income level, income source, marginal tax rates, sanctions and probability of detection) and behavioral determinants (fairness, complexity, compliant peers and ethics, revenue authority initiated contact)

According to Richardson (2006), chronological age of tax payers is one of the most important determinant of tax evasion. Studies find that old tax payers are generally more compliant that younger tax payers with the relationship between age and tax deviance being attributed to lifecycle variations and generational differences. Younger tax payers are more risk taking, less sensitive to penalties (lifecycle variation) and reflect the social and psychological differences related to the period in which they are raised (generational difference).

Richardson also revealed gender as another key determinant of tax evasion where female taxpayers are seen as more tax compliant that their male counterparts. However, there are arguments that the gap is decreasing overtime as new generations of more liberated women tax payers are emerging.

Literature has also revealed that education attainment is another key determinant of tax evasion where increased knowledge of tax evasion opportunities has negative influence

on tax compliance as it assists non-compliance as a result of a tax payer's capacity to understand to comply or not to comply with the tax laws.

Income levels is also taken as a key determinant of tax evasion in Richardson (2006) where middle income tax payers are found to be more compliant with tax laws as compared to low and high income level tax payers.

Marginal tax rates cannot be left out as a determinant and Richardson observed that there is a positive relationship between marginal tax rates and tax evasion and if the correlation between marginal tax rates and income levels is not controlled could lead to variation.

In summary, tax evasion as identified by various studies involve certain characteristics of the countries in the region such as the underground economy, the financial limitation of the tax payers and the high concentration of income. The nature of tax evasion in Kenya is therefore more related to evasion practices in the region and particularly the East Africa region that has great trade ties with Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology involves theories and concepts that underlie the study and the methods used, not to provide solutions but to help the researcher understand how to systematically and theoretically analyze the sources of data, the sampling method used, the sampling design and sample size. It also helps the researcher determine the data collection methods appropriate, techniques, instruments and procedures as well as explaining their relationship to the study.

3.2 Research Design

Research design involves a series of steps undertaken to help the researcher answer the initial question as clearly and convincing as possible and therefore should not be confused with data collection method. The research design is not related to any data collection method or any type of data as it refers to the structure of inquiry and therefore logical rather than logistical. Research designs can be Experimental (involving measurement of variables), Causal (exploring effect of one thing on another), Longitudinal (several observations of the same subject over a period of time) or Cross-sectional (recording observations without manipulating the study environment), failure to clearly distinguish the designs would lead to poor evaluation.

The study employed a survey research design which involved collection of information from KRA and other secondary sources. This is because surveys are more versatile, efficient and can easily be generalized. Descriptive study of a case study nature and hypothesis testing was also used alongside the survey to establish the methodologies used

by tax payers to evade tax, evaluate measures instituted by the Government and determine the impact of the practice on tax revenue and tax rates in Kenya. This is because case studies use more diverse indicators for representing theoretical concept and describing the subject. Testing of the hypotheses focused on KRA tax evasion investigated cases.

3.3 Study population

This can be viewed as the total number of a clearly defined class of people, objects, places selected due to their relevance to the research question. The study population was estimated 16.7 million tax payers in Kenya (World Bank's World Indicators Report, 2012).

3.3.1 Target population

The researcher targeted population was the entire set that one is interested in to draw research conclusions. Nairobi is the economic hub and nerve-centre of buying and selling in the country attracting traders and buyers from all over the country and outside, it measures 694.9 square kilometers and has an estimated population of about 3.2 million people, (Kenya Bureau of Statistics population census, 2009) with about 1.6 million people working in the informal sector (City Council of Nairobi assessment, 2007). The study's target population was the total number of tax evaders investigated by the Kenya Revenue Authority over the past five years.

3.4 Sampling Design

A sample is a representation or subset of the total population to be studied since it is impossible to study the entire population. A sample of 50 tax evaders investigated by Kenya Revenue Authority was selected for the purpose of this study. This is because

there was not enough time, energy, manpower, and equipment to access the whole tax payers population in Kenya. Stratified sampling design was used where the researcher divided the target population into sub groups or strata on the basis of business category and randomly selected final subjects proportionately.

3.4.1 Sampling method and Technique

For the purpose of the study, a probabilistic sampling technique that gave each strata an equal chance of being selected was used thus eliminating chances of biasness and increasing the degree of representativeness.

3.4.2 Sampling Procedures

For the purposes of the study, a total of 50 tax evaders was sampled in the various strata to form a reasonable representation of the total tax evaders population.

Category/Strata	Sample population	Percentage (%)
Manufacturing Industry	13	26
Banking and Insurance Industry	12	24
Building and Construction Industry	10	20
Agriculture Industry	7	14
Service Industry	8	16
Total	**50**	**100**

3.5 Data Collection

Once a sample was selected the data was collected from the sample population, analyzed, interpreted and measured on variables of interest and in a systematic way that helped the researcher answer the research questions. The study relied on secondary data informed by KRA investigated cases, related materials published by government authorities, organizations such as Tax Justice Network, work of other researchers and authors in the form of journals, books, bulletins and newspapers articles as well as sources from the internet.

Data collection method can be qualitative or quantitative, for the purpose of this study; the researcher used quantitative methods to quantify the problem by way of generating numerical data. The approach involved obtaining information from Kenya Revenue authority on the various cases to relate information on tax evasion reasons, tax evasion, its level of spread among tax payers in Kenya, relationship with rates of tax, evasion methods, concealment tactics, plausible solutions and its effects on VAT and income tax revenue in Kenya.

3.6 Data Analysis

The main purpose of data analysis is to obtain maximum information that is pertinent to answer the research questions of tax evasion and its effects on tax revenue in Kenya. This was done after data was checked, verified and updated.

Using a standard model, an individual is assumed to receive a fixed amount of income I and chooses how much of this income to report to the tax authorities and how much to under report. The individual pays tax at rate t on every shilling S that is reported while no taxes are paid on under reported income. However, the individual may be audited with a

fixed probability p; if audited, the underreported income is discovered and must pay a penalty at the rate f on each shilling that was supposed to be paid tax for but was not paid. A regression analysis was used to identify the effect of tax evasion as per the equation below;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where;

Y = Tax revenue;

X_1 = Total Tax evasions

X_2 = Money supply;

X_3 = GDP per capita;

X_4 = Exchange Rate;

ε = Random error

Tax evasion was measured using five point likert scale based on the indicators that form a collection of assessment, sensitization, control systems, monitoring and compliance mechanisms and built in procedures.

Tax revenue was also measured by comparing the level of actual taxable revenue against the budgeted or estimated taxable income over a period of five years from 2009 to 2013. The relationship between the rate of tax and overall tax evasion level was also defined. Significance of tax rate as a contributor to tax evasion was tested using the T-test and a correlation analysis performed to find how the variables were related to each other in the model. Analysis of Variance (ANOVA) was used. The Statistical Package for Social Sciences (SPSS) version 20 was used to analyze the data collected.

Descriptive statistical tools such as frequency tables, pie charts and bar charts in relations to the objectives of the study and with reference to the reviewed literature were used to ascertain whether there are relationships with past studies or not.

Data reporting involved summarization and visualization so as to bring about the main features of the data and the researcher communicated the summary to the outside parties by way of a comprehensive report.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the findings based on the data collected during the study on the effect of tax evasion on tax revenues in Kenya. The sample composed of 50 tax evaders investigated by Kenya Revenue Authority.

4.2 Descriptive statistics

Table 4.1: Summary of the study variables for the study period

	2009	2010	2011	2012	2013	Mean	Std. Dev.
Tax revenue (Billions)	534.0	635.0	707.0	800.5	963.8	910.24	1057.795
Total Tax evasions (Millions)	500	1002	46.92	306.3	2696	728.06	163.999
Money Supply	727.8	864.4	956.3	1197.5	1375.8	1024.34	260.618
GDP Per Capita	771	793	816	933	994	861.40	96.981
Exchange Rate	77.35	79.23	88.23	91.13	90.63	85.31	6.538

Table 4.1 shows the trend of the various variable of the study for the study period. The findings depict that tax revenue improved over the years with a mean score of 910.24. It was also clear that total tax evasions were high in 2013 (2696) with a mean of 728.06. Money supply increased steadily over the study period with a mean of 1024.34 and GDP per capita which had slight changes with a high of 994 in 2013. Exchange rates recorded slight increments every year with an average of 85.31.

4.3 Regression Results

The study conducted a cross-sectional multiple regression to examine the effect of selected determinant variables on the tax revenues in Kenya. Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (tax revenue) that is explained by all the four independent variables (total tax evasions, money supply, GDP per capita and exchange rate).

Table 4.2: Results of multiple regression between tax revenue and the combined effect of the selected predictors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.893	0.797	0.742	0.308

Source: Author (2014)

The four independent variables that were studied, explain 74.2% of the tax revenue as represented by the adjusted R^2. This therefore means the four variables contribute to 74.2% of tax revenue, while other factors not studied in this research contributes 25.8% of tax revenue in Kenya. Therefore, further research should be conducted to investigate the other (25.8%) factors influencing tax revenue in Kenya.

Table 4.3: Summary of One-Way ANOVA results of the regression analysis between tax revenue and predictor variables

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	46.385	4	15.824	4.325	0.0047
Residual	10.16	45	2.571		
Total	56.55	49			

Source: Author (2014)

From the ANOVA statistics in table 4.3, the processed data, which are the population parameters, had a significance level of 0.0047 which shows that the data is ideal for making a conclusion on the population's parameter. The F calculated at 5% Level of significance was 4.325. Since F calculated is greater than the F critical (value = 2.58), this shows that the overall model was significant i.e. there is a significant relationship between tax revenue and its determinants.

Table 4.4: Regression coefficients of the relationship between tax revenue **and the** five **predictive variables**

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	0.861	0.159		2.062	0.027
Total Tax evasions	-0.728	0.108	0.523	3.427	0.031
Money supply	0.604	0.152	0.316	2.562	0.024
GDP per capita	0.542	0.133	0.227	4.827	0.036
Exchange Rate	-0.393	0.161	0.424	1.081	0.029
Dependent variable: Tax revenue					

Source: Author (2014)

The coefficient of regression in Table 4.4 above was used in coming up with the model below:

$$TR = 0.861 - 0.728TTE + 0.604 \, MS + 0.542GDP - 0.393 \, ER$$

Where TR is tax revenue, TTE is total tax evasions, MS is money supply, GDP is Gross Domestic Product per capita and ER is exchange rate. From the model, taking all factors (total tax evasions, money supply, GDP per capita and exchange rate) constant at zero,

tax revenue in Kenya was 0.861. The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in total tax evasions will lead to a 0.728 decrease in tax revenue; a unit increase in money supply will lead to a 0.604 increase in tax revenue; a unit increase in GDP per capita will lead to a 0.542 increase in tax revenue while a unit increase in exchange rate will lead to a 0.393 decrease in tax revenue.

According to the model, all the variables were significant as their significance value was less than 0.05. However, total tax evasions and exchange rate were negatively correlated with tax revenue while money supply and GDP per capita were positively correlated with tax revenue.

4.4 Summary and Interpretation of Findings

From the above regression model, the study found out that there were factors influencing tax revenue in Kenya, which are total tax evasions, money supply, GDP per capita and exchange rate. They either influenced it positively or negatively. The study found out that the intercept was 0.861 for all years.

The four independent variables that were studied (total tax evasions, money supply, GDP per capita and exchange rate) explain a substantial 74.2% of tax revenue in Kenya with equity as represented by adjusted R^2 (0.742). This therefore means that the four independent variables contributes 74.2% of the tax revenue in Kenya while other factors and random variations not studied in this research contributes a measly 25.8% of the tax revenue in Kenya.

The study established that the coefficient for total tax evasions was -0.728, meaning that total tax evasions negatively but significantly influenced the tax revenue in Kenya. These findings are in line with Forbes (2010) who posits that in some cases there are companies which are founded in Kenya, operate in Kenya and sell their products and services in Kenya but the same companies have shell companies registered in tax havens most of which have tax rates between 0 and 15% such as Bahamas, Samoa, Switzerland, Richard Murphy, where they shift their profits and Kenya loses out on revenue.

Tax evasion and avoidance have adverse effect on government revenue. Tax avoidance generates investment distortion in the form of the purchase of assets exempted from tax or under-valued for tax purposes. Avoidance takes the form of investment in arts collection, emigration of persons and capital. And as observed by Toby (1983) the taxpayer indulges in evasion by resorting to various practices. These practices erode moral values and build up inflationary pressures.

The study established that the coefficient money supply was 0.604, meaning that money supply positively but significantly influenced the tax revenue in Kenya. These findings correlate with Humpe and Macmillan (2009) who found out that there is a significant but positive relationship between tax revenue in the US and the money supply.

The coefficient of GDP was found to be 0.542; this means that GDP positively and significantly influence the tax revenue in Kenya. The findings correlate with Wawire (2000) who used total GDP to estimate the tax buoyancy and income-elasticity of Kenya's tax system. Tax revenues from various sources were regressed on their tax bases. Based on empirical evidence, the study concluded that the tax system had raised necessary revenues. Illo (2012) found out that financial performance of commercial

banks in Kenya was found to be positively correlated with GDP and therefore this implies that the banks will remit more taxes hence increased tax revenue.

Finally the study found out that the coefficient for exchange rate was -0.393, this means that exchange rate negatively but significantly influences tax revenue in Kenya. The findings are in line with Njau (2013) who established that the exchange rate of the dollar against the Kenya Shilling showed a negative relationship albeit to a small extent on the ROI of firms' in Kenya which leads to a reduced amount of tax that the companies should remit hence low tax revenue.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary, conclusion and recommendations of the main findings on the effect of tax evasion on tax revenue in Kenya.

5.2 Summary of Findings

Tax payment is a civic duty and an imposed contribution by the government to contribute to her principal source of revenue to provide public goods and services to its citizenry. It is a compulsory unrequited payment to the Government. Tax evasion prevalence is vast and greatly impairs taxation's macro- economic objectives thus creating a gulf between actual and potential government tax revenue raising many issues which need urgent attention and solutions. However much the government endeavors to exercise its sovereign right to collect taxes, nobody likes paying taxes although there is great appreciation that taxes need to be paid and this drives some people into tax evasion making the government constantly fail to raise targeted tax revenue. The study sought to establish how tax evasion affects tax revenues in Kenya. The study employed a survey research design which involved collection of information from KRA. The study targeted 50 tax evaders investigated by Kenya Revenue Authority. The study relied on secondary data informed by KRA investigated cases, related materials published by government authorities, organizations such as Tax Justice Network, work of other researchers and authors in the form of journals, books, bulletins and newspapers articles as well as

sources from the internet. The researcher used quantitative methods to quantify the problem by way of generating numerical data. A regression analysis was used to identify the effect of tax evasion on tax revenue. From the regression model, the study found out that there were factors influencing tax revenue in Kenya, which are total tax evasions, money supply, GDP per capita and exchange rate. They either influenced it positively or negatively. The study found out that the intercept was 0.861 for all years. The four independent variables that were studied (total tax evasions, money supply, GDP per capita and exchange rate) explain a substantial 74.2% of tax revenue in Kenya with equity as represented by adjusted R^2 (0.742). The study therefore concludes that tax evasion negatively but significantly affects tax revenue in Kenya.

5.3 Conclusions

This study examined the effect of tax evasion on tax revenues in Kenya. The four independent variables that were studied (total tax evasions, money supply, GDP per capita and exchange rate) explain a substantial 74.2% of tax revenue in Kenya with equity as represented by adjusted R^2 (0.742).

The study concludes that tax evasion negatively but significantly affects tax revenue in Kenya. Tax evasion and avoidance have adverse effect on government revenue. Tax avoidance generates investment distortion in the form of the purchase of assets exempted from tax or under-valued for tax purposes. Avoidance takes the form of investment in arts collection, emigration of persons and capital. And as observed by Toby (1983) the taxpayer indulges in evasion by resorting to various practices. These practices erode moral values and build up inflationary pressures. This point can be buttressed with the

fact that because of the evasion of tax, individuals and companies have a lot of money at their disposal. Companies declare higher dividends and individuals have a high take home profit. This increases the quantity of money in circulation but without a corresponding increase in the goods and services. This then build up what is known as inflationary trends where large money chases few goods.

5.4 Limitations of the Study

In attaining its objective the study was limited to tax evasion cases investigated by KRA in Kenya. The study relied on secondary data informed by KRA investigated cases. The study was also limited to the degree of precision of the data obtained from the secondary source. While the data was verifiable since it came from KRA investigated cases it nonetheless could still be prone to these shortcomings.

The study was limited to establishing the effect of tax evasion on tax revenues in Kenya. The cases looked at were those which had been investigated by KRA hence the other cases that were not under investigation by KRA were left out.

The study was based on a five year study period from the year 2009 to 2013. A longer duration of the study will have captured periods of various economic significances such as booms and recessions. This may have probably given a longer time focus hence given a broader dimension to the problem.

5.5 Recommendations

5.5.1 Policy Recommendations

The study established that tax evasion had an effect on the tax revenue. Future forecasts should take into account money supply and GDP per capita in particular as having the greatest influence on the tax revenue in Kenya. Exchange rate can also be looked at as it had a negative impact on tax revenue in Kenya.

Due to the potential negative effects of tax evasion on tax revenues in Kenya, new policy guidelines contained in the budget speeches and other tax policy documents should be implemented, as a matter of urgency, almost immediately.

The government should work together with KRA in ensuring that those culpable of tax evasion are prosecuted, fined and jailed to help set an example on others who might be considering the vice. This is because tax evasion costs the government revenue which in turn costs the faithful taxpayers quality service.

The government should therefore embark upon public enlightenment campaign and adequate utilization of tax revenues on public goods to discourage tax avoidance and tax evasion and also the reduction in tax rate. This will certainly enhance and boost revenue generation in the state as is being pursued with vigour so as to survive in the present day economic meltdown, and inflationary setbacks. For the Government to meet up with its revenue targets especially now that the services of tax consultants have been encouraged it would be appropriate to take a look at the factors responsible for the incidence of tax evasion and avoidance since a check on these factors will go a long way in reducing if not eradicating the problem.

5.2 Suggestions for Further Research

A study can be designed to find out the impact of tax evasion on country economic growth. This will give an indication on the effects of tax evasion on the country economic growth.

Another study should be conducted in other countries in East Africa since this study focused on Kenya's situation to determine how tax evasion affects tax revenues. This will offer a basis for comparison on the effects of tax evasion on tax revenue in those countries.

REFERENCES

Allingham M. G, and Sandmo A. (1972). *"Income Tax Evasion: A Theoretical Analysis"*. Journal of Public Economics. 1 (3/4) pp. 323-340.

Bruhin, A., Fehr-Duda,H.,Epper,T. (2010). Risk and Rationality: Uncovering Heterogeneity in Probability Distortion, *Econometrica*, 78(4):1375-1142.

Charles, K. Agnes, M, and Dorothy, N. (2012). "*Tax Avoidance and Tax Evasion as a Factors Influencing 'Creative Accounting Practice'* Among Companies in Kenya

Chen, M. (2004). *Rethinking the Informal Economy: Linkages with the Formal Economy and the Formal Regulatory Framework, EGDI and UNU-WIDER Conference, Unlocking Human Potential:* Linking the Informal and the Formal Sectors, Helsinki.

City Council of Nairobi (2006). Strategic Plan: 2006-2010. Nairobi

Fisman, R, and Wei, S.J. (2001). Tax Rates and Tax Evasion: *Evidence from "Missing Imports"* In China. National Bureau of Economic Research. Working Paper 8551 http://www.nber. orglpapers/w85 51

Fjelstad,O. (1996). *Tax Evasion and Corruption in Local Governments in Tanzania: Alternative Economic Approaches.*

Franzoni, L. (1999). *Tax Evasion and Tax Compliance, Encyclopedia of Law and Economics* vol. 4, pp. 51-94, a cura di B. Bouckaert and G. De Geest, Edward Elgar, UK e University of Ghent, Belgium, 1999 (at SSRN)

Fuest, C. and Riedel, N. (2009). *Tax Evasion Tax Avoidance and Tax Expenditures in Developing Countries: a Review of the Literature. Report Prepared for the UK*

Department for International Development. Oxford University Centre for Business and Taxation.

Gemmell and Morrissey, (2003). *Tax Structure and the Incidence on the Poor in Developing Countries.* Centre for Research in Economic Development and International Trade. University of Nottingham.

www.nottingham.ac.uk/economics/researchlcredit.

Hyman, D.N (1990). *Public Finance: A contemporary Application of Theory of Policy.* International report (2012)

Kenya Bureau of Statistics population census report (2009)

Kenya Economist Intelligence Unit Report, (2010).

Laffer, A.(2009). *Enhancing Texas' Economic Growth Through Tax Reform: Repealing Property Taxes and Replacing.* The Revenues with a Revised Sales Tax

Lamont, M. (1992). *The Economics of a Land Tax in Franzsen,* R.C.D and Heyns, Pretoria, South Africa.

Lymer, A. and Oats, L. (2010). *Taxation: Policy and Practice.* 17th ed., Fiscal Publication

McKerchar,M and Evans, C. (2009). *Sustaining Growth in Developing Countries Through Improved Taxpayer Compliance:* Challenges for Policy Makers and Revenue Authorities. *ejournalof Tax Research*,7,171-201

Mintz, J. (2003). *Income Shifting and Tax Competition, Theory and Evidence from Provincial Taxation in Canada.*

Moyi, E. D. and Muriithi, K. (2003). *Tax reform and Mobilization in Kenya.*

Nairobi County Government Conversion of Buildings into Stalls draft report, (Feb 2014).

Nehemia,O. (1997). *Public Spending, Taxation and Debits, Implication of Tax Reforms in Tanzania. Centre of the Study of African Economies.* Nairobi-Kenya

Nightingale, K. (2002). Taxation: Theory and Practice; *Theory and Practice Updated for 2001-2002*

Oyugi, M.O. (2001). *Spatial Regularization of Informal Sector Activities in Kisumu Town*

Richard Murphy, Forbes (2010), World's Best Tax Havens

Richardson, G. (2006). Determinants of Tax Evasion: A Cross-Country Investigation. *Journal of International Accounting Auditing & Taxation,* 15, 150-169

Sandmo, A. (2005). The theory of tax evasion: A retrospective view. *National Tax Journa*l, 58, 643,633.

Slemrod, J. (2007). Cheating Ourselves: *The Economics of Tax Evasion. Journal of Economic Perspectives.* Vol. 21, P 25-48

Smith, A. (1776). The Wealth of Nations, *An Inquiry into the Nature and Causes of the Wealth of Nations.*

Tanzi, V. and P. Shome. (1993). "A Primer on Tax Evasion." *IMF Staff Papers* 40(4), 807–828

Tax Justice Network Africa (2011). "*Addressing Inequality in Africa through Taxation*".

The Internet (www.cbk.go.ke and www.kra.org.ke)

Toby, R. (1983) The Theory and Practice of Income Tax Macmillan Press Ltd

Transparency International (TI) Report, (2005).

Trotin, G. (2012). Solving the Yitzhaki paradox: *Income tax Evasion and Reference Dependence under Prospect Theory,* AMSE Working Paper no.2012-38

UNHCS-HABITAT, (2009). *Planning Sustainable Cities.*London: Earthscan

UNHSP-HABITAT, (2006). *Innovative Policies for the Urban Informal Economy*. Nairobi

Yitzhaki, S. (1974). A Note on Income Tax Evasion: *A Theoretical Analysis, Journal of Public Economics* 3(2): 201-202)

APPENDICES

Appendix I: Raw Data

Money Supply					
Quarter	2009	2010	2011	2012	2013
Q1	930.4	1054.3	1099.3	1143.8	1336.6
Q2	825.1	857.1	984.0	1088.6	1318.1
Q3	627.8	771.2	908.9	1476.6	1597.8
Q4	176.3	244.3	290.2	374.1	417.3

GDP Per Capita					
Quarter	2009	2010	2011	2012	2013
Q1	676	722	942	992	1090
Q2	734	798	784	937	1012
Q3	744	831	723	831	845
Q4	930	821	814	972	1029

Exchange Rate					
Quarter	2009	2010	2011	2012	2013
Q1	79.58	76.49	82.25	85.71	89.29
Q2	78.45	78.94	86.12	88.85	92.68
Q3	76.24	80.93	93.02	91.17	85.23
Q4	75.14	80.58	91.53	98.81	95.34

Tax revenue (Billions)					
Quarter	2009	2010	2011	2012	2013
Q1	109.1	120.1	134.9	148.2	191.9
Q2	115.4	146.9	147.6	175.5	212.6
Q3	140.4	178.8	176.8	224.3	260.5
Q4	169.1	188.2	247.7	252.4	298.8

Total Tax evasions					
Quarter	**2009**	**2010**	**2011**	**2012**	**2013**
Q1	110	243	9	76.1	573
Q2	115	264	13.6	59	654
Q3	123	241	12	73.9	741
Q4	152	254	12.3	97.3	728