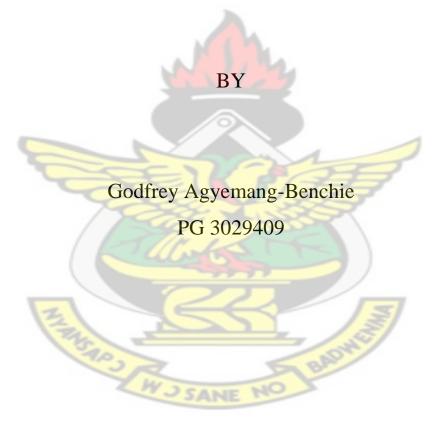
#### Kwame Nkrumah University of Science and Technology

# THE INFLUENCE OF VAT FLAT RATE SCHEME ON TAX REVENUE IN GHANA: A CASE STUDY OF THE OKAISHIE VAT SUB OFFICE



JUNE, 2011

## THE INFLUENCE OF VAT FLAT RATE SCHEME ON TAX REVENUE IN GHANA: A CASE STUDY OF THE OKAISHIE VAT SUB OFFICE

BY
GODFREY AGYEMANG-BENCHIE
PG3029409

A Thesis to the Institute of Distance Learning, Kwame Nkrumah University of Science and Technology – Kumasi, In Partial Fulfillment of the Requirement for the Degree of

COMMONWEALTH EXECUTIVE MASTERS IN
BUSINESS ADMINISTRATION

JUNE, 2011

#### **CERTIFICATION**

I hereby declare that this submission is my own work towards the CEMBA and that, to the best of my knowledge, it contains no materials which is previously publish by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

	KNUS	T			
Godfrey Agyemang-Benchie. PC	£3029409				
Student Name & ID	Signature	Date			
	Willy				
Certified By:					
Ametefee Normanyo	Ametefee Normanyo				
Supervisor's Name	Signature	Date			
Certified By:	Walson No.	BADHU			
Dean IDL	Signature	Date			

#### **DEDICATION**

I dedicate this work to my wife, Linda Agyemang-Benchie and my child, Nhyiraba Agyemang-Benchie and my unborn child, my mother and late father.



#### **ACKNOWLEDGEMENT**

I am grateful to the Almighty God for giving me His grace to undertake this course and especially for completing this work on schedule.

I am also grateful to Mr. Ametefee Normanyo, my supervisor, for his guidance and pieces of advice which enabled me complete this work on schedule. I would also like to thank Messrs Stanly Akabua and Ras Kumabia my colleagues in this course, for their support and encouragement.

Finally, I would like to thank my wife, Linda Agyemang-Benchie and my child, Nhyiraba Agyemang-Benchie for allowing me to stay away from them in order to complete the programme.



#### **ABSTRACT**

Governments all over the world are struggling to meet the challenge of financing the ever increasing national expenditure due to the growing population and its resultant demand on infrastructural expansion as well as other recurrent expenditure. Taxes are seen as the key building block to economic development. Taxes are required to overcome the problem of free-riding inherent in the financing of public good to control other imperfection and to achieve social justice by redistribution. This study therefore examined whether the introduction of the Vat Flat Rate Scheme (VFRS) has helped to increase revenue mobilization of the Okaishie Vat Sub Office (VSO). It also assessed if there has been an increase in the trader (retailers) population and its effect on revenue. The research sort to compare revenue contribution of traders(retailers) that were migrated to operate the Flat Rate, three year before they were migrated and three after they were migrated. The study used a quantitative approach. Questionnaires were administered to 157 retailers various categories. Cluster sampling technique was used. Secondary data was collected from other sources such as Information Systems Support Unit (ISSU), Research Monitoring and Planning Unit of the Vat Service. Also data was collected from the Okaishie VSO. Data collected was analysed using SPSS, and Excel. The finding revealed that there was a significant difference in the contribution of the retailers who operated under the Standard rate and were migrated to operate under the Flat rate, their three years contribution before they were migrated and three years contribution after their migration. The introduction of the Flat Rate has significantly increased the number of retailers that have been registered and has a positive effect on revenue. However the percentage of the tax collected from the retailers is below 50% as against the total tax revenue collected. The study suggests that more education

on VAT especially on the Act, should be embarked upon and also continuous monitoring exercise be conducted to ensure that traders issue the vat invoice to avoid under declaration of the tax collected. The Vat Service should collaborate with the Registrar General's Department so as to get prompt information on newly registered trader.



#### LIST OF ABBREVIATIONS

PN Public Notice

CBD Central Business District

VAT Value Added Tax

ISSU Information Systems Support Unit

VFRS Vat Flat Rate Scheme

VSO Vat Sub Office

RM&P Research Monitoring and Planning

SPSS Statistical Product for Social Solutions



#### LIST OF APPENDICES

Appendix		Page
A.	Questionnaire	78
B.	Vat Return form for Standard Rate Operators.	80
C.	Vat Return form for Flat Rate Operators.	81
D.	Map of Ashiedu Keteke Sub Metro	82
E.	Flat Rate Scheme Invoice	83



TABI	LE O	F CONTENTS P	age
CHA	PTEF	R ONE	
	Intro	duction	1
1	.1 B	Sackground to the Study	1
1	.2 S	tatement of Problem	4
1	.3 R	Research Objectives	6
1	.4 R	Research Question	6
1	.5 S	ignificance of Study	7
1	.6 C	Organization of the Study	7
		5113	
CHA	PTER	R TWO	
LITE	RAT	URE REVIEW	8
		Introduction	8
2	2.1	The Origin, Historical development and Theoritical	
		Basis of Taxation	9
2	2.2.	Description of Taxation	10
2	2.3	Development of the Various Tax Bases	10
2	2.3.1	Taxation of Income	11
2	2.3.2.	Taxation of Wealth	11
2	2.3.3	Property Taxation	12
2	2.3.4.	Taxation on Goods and Services	12
2.	.4.	Objectives of Taxation	13
2.	.4.1.	Revenue	13

2.4.2	Redistribution of Resources	14
2.4.3	Economic Growth	14
2.4.4	The reprising	15
2.5	Concept of Taxation	16
2.6	Taxes Replaced by VAT	17
2.7	Value Added Tax	19
2.7.1	Features of VAT	19
2.7.2	Principles of VAT	20
2.7.2.1	Origin Principle	20
2.7.2.2	Destination Principle	20
2.7.3	Variants of VAT	21
2.7.3.1	Consumption VAT	21
2.7.3.2	Income VAT	21
2.7.3.3	Gross Product VAT	22
2.8	VAT Evasion	23
2.9.	Method of Computation of V AT	24
2.9.1	Addition Method	25
2.9.2	Subtraction Method	25
2.9.3	Tax Credit or Invoice Credit Method	26
2.10	Rate Structure of VAT	27
2.11	VAT Flat Rate Scheme (VFRS) in Ghana	27
2.11.1	Definition, Scope and Coverage of the Vat Flat Rate Scheme	28
2 11 2	Features of the Vat Flat Rate Scheme	20

2.11.3	Benefits of the Scheme	30
2.12	Conceptual framework	30
CHA	PTER THREE	
RESEA	ARCH METHODOLOGY	
3.0	Introduction	33
3.1	Study Area	33
3.2	Research Design	33
3.3	Population and Sample	34
3.4.	Sampling Technique	35
3.5	Method of data collection	36
3.6	Data Analysis and Presentation	36
СНАРТЕ	R FOUR	
DATA AN	NALYSIS AND DISCUSSION OF RESULTS	40
	Introduction	40
4.1	Analysis of Vat Collection from Retailers for the	
	period 2005 to 2010	40
4.2	Relationship between Flat Rate tax and newly registered	
	Trader Population	52
4.3	Total Flat Rate Tax collection from Okaishie VSO over	
	the period 2008 to 2010	53
4.4	Percentage of Flat Rate Tax to Total Tax	59

4.5	Effectiveness of the V	at Flat Rate Scheme on Tax revenue	60
4.6	Summary of Analysis		68
СНАРТІ	ER FIVE		
CONCL	USION AND RECOM	IMENDATIONS	72
5.1	Conclusion		72
5.2	Recommendation	KNUST	73
REFERE	NCES		74
APPEND	IX A		78
APPEND	OIX B	1123	79
APPEND	OIX C		80
APPEND	IX D		81
APPEND	IX E	EV PIE	82
	CONSTRIKE	W SANE NO BROWLER	7

#### LIST OF TABLES

Table 3 1	Distribution of Sample Size	35
Table 4.1	Distribution of 2005 Retail Tax collection	41
Table 4.2	Distribution of 2006 Retail Tax Collection	43
Table 4.3	Distribution of 2007 Retail Tax Collection	45
Table 4.4	Distribution of 2008 Retail Tax Collection	46
Table 4.5	Distribution of 2009 Retail Tax Collection	48
Table 4.6	Distribution of 2010 Retail Tax Collection	49
Table 4.7	Test for Differences in Data	51
Table 4.8	Total Flat Rate Tax Verses retailer Population	52
Table 4.9	Seasonal Indexes for VFRS, 2008 to 2010 Okaishie VSO	55
Table 4.10	Test for Differences total Okaishie VFRS collection for	
	2008, 2009 and 2010	58
Table 4.11	Percentage VFR Tax of Total Tax of Okaishie VSO	59
Table 4.12	Length of Stay with the VAT Service	60
Table 4.13	Category of Business	61
Table 4.14	Respondents' Understanding of the VAT System	62
Table 4.15	Gender and Understanding for VAT System	62
Table 4.16	Business Category and Understanding of VAT System	63
Table 4.17	Educational Background of Respondents	64
Table 4.18	Simplicity of VFRS	65
Table 4.19	Level Playing Field of VFRS	65

Table 4.20	Addition of 3% to Price of Item before Selling	67
Table 4.21	Issuing of VAT Invoice to Cover all Business Activities	68



#### LIST OF FIGURES

Fig 4.1	Histogram of Tax Paid for 2005	42
Fig 4.2	Histogram of Tax Paid for 2006	44
Fig 4.3	Histogram of Tax Paid for 2007	46
Fig 4.4	Histogram of Tax Paid for 2008	47
Fig 4.5	Histogram of Tax Paid for 2009	49
Fig 4.6	Histogram of Tax Paid for 2010	50
Fig 4.7	Time Series Plot for VFRS for 2008 to 2010	54
Fig 4.8	Histogram of VFRS Paid for 2008	56
Fig 4.9	Histogram of VFRS Paid for 2009	56
Fig 4.10	Histogram of VFRS Paid for 2010	57

#### CHAPTER ONE

#### INTRODUCTION

This chapter is the overview of the study. It covers background to the study, problem statement, objectives, research questions, significance of study, and organization of study

### 1.1 BACKGROUND TO THE STUDY

Taxes matter. People talk about them, complain about them, and try to dodge them when they can. (Bird and Zolt, 2003). Governments all over the globe are struggling to meet the challenge of financing the ever increasing national expenditure due to the growing population and its resultant demand on infrastructural expansion as well as other recurrent expenditure. Taxes are seen as the key building block to development especially in Africa."

Taxes are required to overcome the problem of free riding inherent in the financing of public goods to control other markets imperfections, and achieve social justice by redistribution. Economic growth "efficiency" is promoted via the first set of goals, whereas social Justice "equity" is promoted via redistribution and the provision and merit goods most notably health and education (Avi-Yonah and Margalioth, 2006,).

According to Avi-Yonah and Margalioth, (2006), the share of non-tax revenue of total revenue is, on the average larger for developing countries than developed countries. Nevertheless, the main source of government revenue in developing countries, taken as a whole, is the tax system.

During the budget speech of 2002, the Minister of Finance said indirect taxes contribute the bulk of revenue (equaling 7.5% of Gross Domestic Product [GDP] ) to government 's coffers. However, a closer look reveals that bulk of VAT is levied on imports; therefore domestic indirect tax collection is not too high (Matthias and Udo, 2003)

A general advice of the International institutions such as the International Monetary Fund (IMF), and World Bank given to developing countries over the past few decade has been to replace trade tax with domestic consumption taxes particularly Value Added Tax (VAT) and to maintain a relatively high corporate income Tax rates(Avi-Yonah and Margalioth, 2006).

Ghana's tax base remained narrow and in some cases inefficient and unfair to most taxpayers. The tax system was dependent on a few commodities, large companies and only few individuals. There was an urgent need to broaden the base, hence further attentions had to be given to the indirect tax regime. (Public Notice (PN) 1).

Value Added Tax (VAT) was introduced to replace the Sales and Service Taxes then administered by Customs Excise and Preventive Service (CEPS) and Internal Revenue Service (IRS) respectively. These taxes operated under different regimes and were not uniform for all taxpayers and also costly to administer. (PN1)

According the (PN 1) VAT brought Sales and Service Tax under one umbrella with a single positive rate to replace the multi-rate indirect tax regime (ranging from 10% to 15%) that earlier operated. This made the administration of the indirect tax system in the country simpler, fairer and more efficient.

Vat was seen as a way of improving the revenue performance of Ghana's tax system. Although in 1998 Vat was introduce at a low rate of 10% it generated 20% more revenue than the sales tax it replaced (World Bank PremNotes. 2001).

In 1999, Ghana's tax revenue showed the following sources: Tax on Domestic goods (20%), International trade (25%), Taxes on income and property (29%) and Value Added Tax (26%).

Indirect tax receipts in 1999, amounted to &ppi1,362.7b billion (old cedis), exceeding the budget estimate of &ppi1,356 billion (old cedis). VAT collection amounted to &ppi1792.1 billion (old cedis), exceeding the budget estimate of &ppi1700 billion (old cedis) by 13%.

Also import VAT duties collected amounted to ¢469.1 billion showing an increase of 70.3% over 1998 import sale tax collection. (2000 budget)

Contrary to the objectives of expanding the tax net, with its corresponding increase in tax revenue, high level of illiteracy on the part of traders especially those in the informal retail sector, computational complexities, and difficulty in keeping records under the invoice credit system (Standard Rate) have increased the burden of compliance of retailers.

In order to improve the compliance rate and further widen the tax net, to increase tax revenue mobilization, a new scheme which was simpler was introduced. The Vat Flat Rate Scheme (VFRS) was introduced in 2007 VAT (amendment) Act 2007.

The VFRS is a special method of collecting and accounting for VAT/NHIL. It is designed for traders operating in the retail sector. Under the VFRS, registered retailers of

taxable goods shall charge VAT/NHIL at a marginable rate of 3% on the value of each taxable item sold.

The VFRS was introduced because of the low levels of literacy among retailers of taxable goods especially those of the informal retail sector, and the associated the computational difficulties in calculating the VAT payable under the Invoice Credit/Standard rate method have increased the burden of compliance for the retailer. This has necessitated the introduction of the VFRS which is simpler to operate, comes with minimal record keeping requirements, eliminate the difficulty of apportioning input tax into deductible and non-deductible input taxes and has the potential to expand the tax net and create a level playing field for all retailers.

#### 1.2 STATEMENT OF PROBLEM

Every government largely depends on the state's revenue through taxation to execute their policies. A state's inability to mobilize considerable amount of revenue influences its development and social intervention.

It is in view of this anxiety and anxiousness with regards to revenue that President Atta Mills in 2010, embarked on public servants' orientation drive to increase productivity and revenue.

It is undoubtedly conspicuous that Ghana's revenue generation and mobilization is seriously challenged. It was announced that almost all government agencies that are responsible for paying annual dividend into state coffers fail over the years to contribute their

quota. Incidentally government tend to largely depend on a very few revenue sources including the Domestic Tax Revenue Division, that is Internal Revenue Service (IRS) and the Value Added Tax (VAT) Service and the Custom Division of the Division of the Ghana Revenue Authority.

It is widely argued that very few citizens in Ghana pay taxes. If all will pay taxes and not evade, there might not be the need to increase taxes in the country or go for foreign loans. In view of this, continuous pressure is brought on the few people who are committed to paying tax. The VAT service in the bid to widen the tax net reviewed its revenue mobilization mechanism introduced the VAT Flat Rate Scheme (VFRS). The VFRS allows the taxpayer to apply a marginal tax percentage representing the net VAT on the value of the taxable goods supplied.

The VFRS is an alternative to the invoice credit method of VAT accounting (Standard Rate). The standard rate was seen to be complex requiring a little technical expertise. Most traders, especially those in the retail sector are illiterate and found its computation cumbersome and unfriendly. As a result such traders resisted being registered under the Standard rate. Also wholesalers and distributors refuse to issue the commissioners invoice (VAT invoice) to these retailers making it impossible to take input VAT under the standard rate regime. The wholesalers and distributors with this under declare their output tax.

The VFRS requires little record keeping and provided a simplified and straight forward computation for the convenience of the traders.

This measure is aimed at widening the tax net to cover more retailers and eventually increase in government tax revenue. The aim of the study is to find out whether these objectives have been achieved or not compared to when registered retailers operated under the standard rate.

#### 1.3 RESEARCH OBJECTIVES

The general objective of the study was to assess the influence of the VFRS on Tax Revenue in Ghana. Specifically it attempts to

- Assess if the VFRS has increased revenue mobilization
- Determine whether there has been an expansion of the tax net
- Determine if the computation of VFRS is convenient and simple as compared with the computation of the Standard Rate.
- Assess if the introduction of VFRS has created a level playing field for all retailers.

#### 1.4 RESEARCH QUESTIONS

The study was guided by the following research question

- Has the service recorded a tremendous increase in revenue with the introduction of the VFRS.
- Has VAT Service recorded a considerable increase in the number of traders?
- Do traders have any problem with the operation of the VFRS?

• Has the VFRS really created a level playing field for all retailers?

#### 1.5 SIGNIFICANCE OF STUDY

This study aims at showing stakeholders such as traders, taxpayers, tax institutions and government, how the introduction of the VFRS has influenced tax revenue in Ghana. It is to assess whether the Vat flat rate has help increase tax revenue and also if the tax net has been widen. Also the study will bring out recommendation that will help improve the operations of the VAT Service with respect to the VAT Flat Rate Scheme.

#### 1.6 ORGANISATION OF STUDY

The research work is presented in five chapters. Chapter one comprises of the background to the study, problem statements, objective of the study, research questions, and the significance of the study. Chapter two reviews literatures related to taxation, VAT and VAT Flat Rate Scheme. Chapter three outlines the methodology used in bringing out the findings of the research work. It is made up of processes and methods used in data collection, sampling techniques used for the research and the methods employed in analyzing the data. The fourth chapter consists of presentation and analysis of data and discussion of findings. Chapter five talks about summary of Major findings, conclusion, recommendation to improve on tax collection system in Ghana.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### **INTRODUCTION**

This Chapter covers a conceptual framework on the influence of the Vat Flat Rate Scheme on tax revenue in Ghana. In order to provide suitable theories on the topic under investigation the researcher has reviewed a number of literatures. This will help to explain some key provisions which are significant to the study. The reality of taxation within modern economy has become a widely accepted certainty. This chapter examines the historical development of taxation in general, with emphasis on income taxes, tax on wealth and consumption tax. This provides a contextual understanding of modern tax system and the interaction of wealth transfer taxation with the other taxes in the system. Objective of taxation and essential principles of taxations are also outlined.

### 2.1 THE ORIGIN, HISTORICAL DEVELOPMENT AND THEORETICAL BASIS OF TAXATION

The idea of taxation developed closely with the idea of an orderly society and the institution of a government with authority (Brautigam in Bruatigam and Fjelstand and Moore , (2008). In ancient times the mere power of sovereign was the establishment of its entitlement to commit acts of aggression against its subjects, including its claim against their resources (Hepker, 1973). Apparently, the first known system of taxation can be found in Ancient Egypt around 3000 BCE and 2800 BCE, when the pharaoh conducted a biennial tour

of the empire, collecting offerings from the people. Apparently, the tax was at some point calculated by measuring the rise and fall of the Nile River, (Croome, 2008). In the ancient Roman and Greek Empire, offerings were initially collected in indirect ways, such as through spoils of war, harbour dues, tolls and customs on trade and commerce (Doyle, 2008).

With the subsequent rise of various empires and kingships, for example the empire of Charlemagne in England and the Saxon kings in England, offerings to the sovereign were initially voluntary (Seligman, 1969). It was unacceptable for a sovereign to impose taxation on its subjects, unless in time of war (Doyle, 2008) or as a substitute for a particular benefit (Buehler, 1948). However, the difficulty with contractual taxation is that it requires a consensual undertaking by the citizen (Mack in Racheter and Wagner, 2002) and could therefore not serve as a foundation for among other this, the redistribution of resources (Musgrave, 2000).

During the Middle Ages, the idea developed that taxation is actually an intrinsic and requisite power of the government to force its subjects to give up their property without their consent, a process of "forced exchange", or "coercive taxation" (Brennan and Buchanan, 2006). This ideology was reinforced with the development of nation state and an increased need for public revenue. This theory implies that an express provision conferring on a government a power tax is not essential (Croome, 2008).

This fiscal legislation need furthermore not match to the "canons of taxation" (In Partington v Attorney-General, 1869). However, a government has limited powers as far as taxation is concerned in view of the modern idea that a government should be accountable to its citizen, requiring fiscal legislation to comply with the relevant country's constitutional

restrictions (Calitz and Steenekamp, 2008). The concept of accountability is important in the area of taxation, if one considers that taxation, as a means of oppression, has played an important role in several revolts, revolution and wars.

#### 2.2 DESCRIPTION OF TAXATION

Providing a broad definition of taxation is not easy. It can best be described as monetary-based (Thuronyi, 2003), obligatory contribution (Croome, 2008) payable by the public as a whole or a substantial sector thereof to a government (Moore in Brautigam, Fjelstad and Moore, 2008).

Hick (1965), states that "A tax is a compulsory contribution from the person to government to defray the expenses incurred in the common interest of all without reference to a special benefit conferred." He added that "A tax is obligatory contribution of wealth of a person or body of persons for the service of the public powers."

#### 2.3 DEVELOPMENT OF THE VARIOUS TAX BASES

Seligman (1961) refers to the development of five traditional faculties or "tax bases" throughout history. In primitive communities, where there were no very rich and no very poor and where individual revenue was derived from individual exertion, numbers formed a satisfactory test of ability in taxation. The development of private property and the differentiation of economic classes led to the second stage of faculty of development, namely property. A third development was the notion to tax expenditure. The fact that a tax on

expenditure became an increasingly heavy burden on the least wealthy classes contributed to the development of the next stage, namely the notion of taxing the produce of property, irrespective of who owned the property. This development was a forerunner of the taxation of net profit, or income.

Taxes can be classified and categorized in various ways such as taxation on income, taxation on wealth, property taxation, taxation on goods and services among others.

#### 2.3.1 TAXATION OF INCOME

Broad-based income taxation is a relatively modern innovation. Apparently, the first true progressive direct income tax was introduced in Britain by William Pitt the Younger in1799, to pay for weapon and equipment in preparation for the Napoleonic wars (Sabine, 1980). It developed in the early nineteenth century principally in England, Sweden, and some of the income tax only towards the end of the nineteenth century or in the twentieth century (Thuronyi, 2003).

#### 2.3.2 THE TAXATION OF WEALTH

Historically, property taxes have been divided into two basic categories, namely the taxation of ownership of property and the taxation of the movement or transfer thereof. A third category developed in conjunction with the modern income tax, whereby the net increase in the monetary value of a taxpayer's property, or wealth, (Riley, 1991), is subjected to taxation.

#### 2.3.3 PROPERTY TAXATION

The property tax base includes real property as well as personal property. A contemporary form of taxation of property ownership is what is commonly referred to as a recurrent tax on immovable property or "property tax", which embraces a periodic tax charged upon the owner (or in some instances the occupier) of immovable property. These taxes have crystallised as an ideal way to finance government expenditure (Thuronyi, 2003).

#### 2.3.4 TAXATION ON GOODS AND SERVICES

The earliest taxes on consumption were custom and excise duties (Thuronyi, 2003). General sales taxes where government charge a tax at the point of acquisition of goods and services, on the total value of the exchange, were first introduced in France and Germany around the middle of the first World War. It became an accepted system for government to raise tax revenue between 1930 and 1965(De Kam and Heady, 2003). A modern improvement in the of indirect consumption taxes is the Value Added Tax(VAT), which is levied on the added value which results from each taxable transaction. VAT was invented by the French economist, Maurice Laure, in 1954, and has been adopted in the member states of the European Union, Nordic countries, New Zealand, Australia, Canada and Japan. The only member of the OECD that continues to resist the introduction of VAT is the United State(Thuronyi, 2003).

The taxation of goods and services has represented an elementary part of the South African tax system over the years. The earliest taxes, namely customs and excise duties, have remained part of the system. Currently excise duties are on levied on, for example wine, spirits, beer, other fermented beverages, fuel, diesel, plastic bags, international air travel and various other products (Cnossen,2006).

In 1978 a General Sales Tax (GST) was introduced, following the international example. This tax, with its single-stage collection system, was replaced by a VAT in 1991, when the VAT Act (Act 89 of 1991) was implemented. Besides the income tax. VAT is currently the second largest revenue raiser in South Africa.

#### 2.4 OBJECTIVE OF TAXATION

According to Bird and Zolt, (2003) the main purpose of taxation is to generate sufficient revenue to finance public sector in a non-inflationary way. Also taxation can be use to carry out socio-economic and political objectives.

#### **2.4.1 REVENUE**

Almost all social policy efforts require expenditure, which can be financed through capital loan, user charges, administrative fees, government-induced inflation or taxation. An important purpose of taxation is therefore to generate adequate revenue to assist in the financing of government activities (Doyle, 2008). In South Africa the actual total taxes collected for 2007/2008 year of assessment was R572 billion. The non-tax revenue collected amounted to R11.67billion (National treasury, Republic of South of Africa, 2009). Revenue collected through taxation has contributed a substantial 98% of total gross revenue for that year of assessment.

#### 2.4.2 REDISTRIBUTION OF RESOURCES

According liberal thought a legal system should value political liberty, equality of opportunities and fairness in distribution so that all people may have an equal opportunity to pursue their economic dreams (Rawls, 1971). The redistribution of resources can support these values by reducing the economic and political power that is concentrated in the hands of the wealthy and raising the socio-economic standards of the poor (Duff, 1993). Redistribution can, for example, be effected through increased taxation on the more wealthy members of society especially through progressive taxation and wealth taxes (Doyle, 2008).

#### 2.4.3 ECONOMIC GROWTH

Adequate levels of investment and savings are crucial for economic growth. Tax policy can be formulated to act as an incentive for economic growth and development, the avoidance of inflation and unemployment and the encouragement of savings and investment.

Although taxation can serve as a fiscal tool to enhance a favourable climate for investment, the Margo Report concluded that fiscal incentives would not have a large positive effect on personal saving (Margo Report, 1996). However it was emphasised that no rationalization existed for the continuation of fiscal disincentives to save (Margo Report, (1996). Instead of specific tax incentives, the report favoured the international trend of a broad-based system with lower tax rates. This proposition was supported in the Interim Katz Report with the statement that tax incentives aimed specifically at raising the aggregate level of investment and saving do not make much economic sense (Interim Katz Report, 1994).

In respect of taxation's relation to employment, the Margo Report stated that the short-term manipulation of taxes would be unlikely to successfully encourage employment. It suggested that efforts to encourage employment rather be directed at the long term (Margo Report, 1986).

#### 2.4.4 THE REPRISING

The encouragement or discouragement of certain types of activities, referred to as "reprising" can be addressed by means of taxation (Doyle, 2008). The so-called "sin-taxes", levied on products such as alcohol and tobacco, were initially implemented to discourage people from consuming these products (Smith, 1776). The criticism against reprising through taxation flows from the principle of non-discrimination, which requires the government to be neutral towards all kinds of activities. However, the counter-argument is that these taxes can assist in the raising of revenue towards the social cost associated with the misuse or abuse of these products, which justifies discriminatory taxation (Wagner, 1973).

KNUST

#### 2.5 CONCEPT OF TAXATION

Taxation is said to date to biblical times where subjects or citizens were made to pay tax in time and wealth towards the building of the Babel tower and Jerusalem temple. Even was asked to pay tax, that is why he said "give to Caesar what belongs to Caesar and to God what belongs to God". Modern governments form an exceptional role to play in every nation. They have the task to protect the nation from internal chaos and external attack. They engage

with various groups of people to be able to run the nation. Despite the general trend particularly in the twentieth century towards privatization, the preservation of the state apparatus, production capacity, health services, education, housing, among others, to a great extent depend on the governments.

The contemporary view of taxation stems from the common premises that no one can be an island of himself. The struggle against poverty, crime, economic stagnation, etc., requires the combined effort of all and thus all must pay for it. Therefore in contemporary times taxation is defined as follows;

"Taxation is the practice whereby a state or government exacts contributions from its citizens or from the residents of the territory for the maintenance of the State machinery" ((Goldsmith,1951).

Hicks, (1965), states that A tax is a compulsory contribution from the person to government to defray the expenses incurred in the common interest of all without reference to a special benefit conferred. He added that, a tax is obligatory contribution of wealth of a person or body of persons for the service of the public powers.

By definition of the various authors, it is now clear that taxes are seen as compulsory extraction, that involve personal obligations for common public purposes. Harley Lutz however, highlighted on this point when he noted that "the modern perspective in taxation is a product of the growing social cohesion and sense of common social obligation that have characterized human development during the last century. The underlying factor in the modern concept emphasizes the greater social unity and stronger sense of common burden and responsibilities, which are features of modern life.

#### 2.6 TAXES REPLACED BY THE VAT

The Sales Tax and Service Tax which were replaced by VAT were then administered by CEPS and IRS under the following laws

- Customs Excise and Preventive (Management) law 1993, (PNDC Law 330) as amended.
- Service Tax Act 1995 as amended.

The feature of VAT included the following

- Some basic goods and essential services are exempted from VAT to provide relief for low income earners.
- Export are zero-rated to enhance the competitiveness of the country's products on the international market
- VAT can only be collected by businesses registered for the Tax. These enterprises must have their VAT registration Certificates prominently displayed at their principal place of business.
- Registered businesses are required to issue the Commissioner's Vat invoice to all taxable supplies made.
- VAT is included in the price to the customer
- VAT is a visible tax; you know when you are paying.

(Public Notice 1)

The benefit of VAT to consumers, businesses and the economy in general include the following;

- ➤ VAT improves record keeping in businesses
- > VAT is a fairer tax because it covers both goods and services.

- ➤ VAT unlike the Sales and Service taxes is applied evenly (i.e. at the same rate of tax and under a uniform credit system) on a broader range of consumer spending
- ➤ VAT is a more efficient way of collecting the general consumption taxes.
- ➤ VAT provides for lower income groups by exempting basic goods and essential services and drugs and medicine, health care, education, housing public transportation. No VAT is charged on these exempt items.
- > VAT stabilizes the collection of government revenue for national development

#### 2.7 VALUE ADDED TAX (VAT)

Simply stated VAT means a tax levied on the value added by a firm or individual on goods and services purchased from others in its comprehensive form, it is applicable to producers, wholesalers, and retailers. The choice of a form of VAT would depend on upon the revenue needs and socio-economic conditions of the country (Gayathri 2008).

According to Economy Watch (2011), Value added Tax is an indirect tax, which is imposed on goods and services at each stage of production, starting from raw materials to final product. VAT is levied on the value addition at different stages of production. VAT is widely applied in the European countries. However, now a number of countries across the globe have adopted this tax system.

#### 2.7.1 FEATURES OF VAT

- 1. The outstanding feature of VAT is its flexibility to adopt itself to the diverse socio-economic conditions, legal framework and administrative institution for any adopting country.
- 2. It removes the tax induced distortions and cascading effect.
- 3. It gives total transparency to the tax system as computation of the actual tax payable on a commodity is easy and intelligible requiring no special expertise.
- 4. The most appealing feature of VAT is its neutrality, which the primary concerns of an economically efficient tax system.VAT with uniform rates influences neither producers' preference neither producer's preference nor consumers choice. It does not distort producers' decision to maximize efficiency and profit.

#### 2.7.2 PRINCIPLE OF VAT

Two principles relating to trade are available for implementing VAT.

#### 2.7.2.1 ORIGIN PRINCIPLE

Under the Origin Principle, value added domestically on all goods whether they are exported or internally consumed is subject to tax. Consequently tax cannot be levied on value added abroad and this principle confine VAT only to goods originating in the country of consumption. In short export is taxable under this principle while import are exempt. It is mostly used in conjunction with income VAT and is unpopular for obvious reasons.

#### 2.7.2.2 DESTINATION PRINCIPLE

Under Destination Principle, value added, irrespective of the place or origin is taxable. All goods are taxed in they are consumed within the country. In this regime, exports are exempt while imports are subjected to tax. Destination Principle is normally used along with consumption VAT. In a federal set up, destination principle is preferred for taxation of products consumed within the various states of the country.

Another attractive feature of this principle is that it treats imported goods on par with domestic products unlike Origin Principle which gives indirect protection and even preference to the producers abroad.

#### 2.7.3 VARIANT OF VAT

There three (3) main variant of VAT. These are Consumption VAT, Income VAT, and Gross Product VAT. Though there are three variants of VAT, very often the choice falls on consumption VAT which has been accepted by most of the VAT operating countries.

#### 2.7.3.1 CONSUMPTION VAT

If VAT is confined to consumer goods it is known as consumption VAT. In this case, the value added by the firm to the goods and services purchased from others is subject to tax. The value addition can be on raw materials, intermediate goods, or manufactured goods. It can also be extended to value addition of wholesaling or retailing points. The final tax

element is recovered from the retail price which would include values added at all the previous stages of production and transaction.

The most appealing aspect of the variant of VAT is that it allows deduction of all purchase including capital assets. The base of consumption VAT is the total private consumption in the country which is the chosen target for any form of indirect taxation.

# KNUST

#### **2.7.3.2 INCOME VAT**

The second important form of VAT is the income variant which, while taxing all sales allows deduction only to the extent of depreciation on capital goods. It roughly represent the value added by the total economic activity of the country during the period of taxation.

The base of Income VAT is the same of that of a comprehensive income tax which imposes tax on consumption including investment and gives deduction for depreciation on capital goods. Income VAT has not been favoured by many countries and only Argentina, Peru and the State of Michigan in USA are currently using it. It is perhaps avoided for the practical problem in computing depreciation of capital goods which particularly difficult in an inflationary economy as the formula for the calculation many not be acceptable to the taxpayer.

#### 2.7.3.3 GROSS PRODUCT VAT

In the Gross Product VAT, tax deduction is not allowed even for the replacement of capital goods. Deduction is given only for purchases of current consumption goods. The value added in the case of gross product VAT far exceeds the retail sale in a particular year. Presently only Finland, Morocco and Senegal use its modified version. The main drawback of this form of VAT is the discriminatory treatment meted out to capital goods which discourages investment. The element of double taxation of capital goods inherent in Gross Product VAT slows down the replacement of old worn out plant and machinery delaying modernization (Gayathri 2008).

According to Sicat (1988), the three types of VAT differ in terms of the items deductible from the VAT base. With a gross product type of tax only purchases of material and services are deductible. The gross product type of tax often leads to double taxation, as capital goods are taxed when first purchased, but may be taxed again when sold. The income type tax, on the other hand, also allows for the exclusion of depreciation on capital goods, however, the calculation of depreciation is a problematic issue. A consumption type tax allows for the deduction of purchases of materials and services as well as investment purchased. Most countries adopted a consumption-based taxed, since VAT was in most cases intended to replace another consumption type tax such as sales tax. Consumption based VAT also does not create a disincentive for investment like the other two types.

#### 2.8 VAT EVATION

The VAT is harder to evade than its forerunner the sales tax especially when the invoice method is used. The reasons are:

- The invoice provides a good audit trail.
- The tax is collected at all stages of production.
- Import taxes are collected at the point of entry.
- The onus of proof for tax credits is on the taxpayer.
- Regular crosschecking, even on a sample basis, helps income tax enforcement.
- Better record keeping.
- The vat base may be widened over time by including more services, or by covering more goods.
- The invoice method makes VAT self-enforcing, since the taxable buyer has incentive to insist on an invoice (Agha and Haughton, 1996).

However, according to Tait (1988), VAT evasion could the take the form of false claims for tax paid at previous stages, for example presenting forged invoices for nonexistent or exaggerated purchases. For established business liable to VAT on their own output there is some limit to this since excessive credit claims would imply business was operating at an implausibly low margin. He also said he universal zero-rating of export means that fraudulent claims to have exported commodities are an inherent difficulty for the VAT. Such fraud may involve non-existent commodities, genuine commodities that have been sold on the domestic market. In either case, it poses a challenge in implementing VAT that all administrations find

trying between the desire to pay refunds promptly, in order to avoid converting the Vat into an export tax, and the need to protect revenue.

Bird, (1993) also said false claims of credit or refund is the most obvious way to exploit the credit mechanism. He said credit claimed for vat on purchases that are not creditable arises in two main forms. First, when traders supply a variety of output, some subject to Vat and others exempt, they have an incentive to allocate inputs to production of the taxed items, rather than the exempt. Also, items bought for private consumption may be misrepresented as business inputs allowing the Vat to be recovered.

## 2.9 METHOD OF COMPUTATION OF VAT

There are several methods to calculate the value added by a firm to the goods and service bought from others. The three commonly used methods are Addition method, Subtraction Method, and Tax Credit or Invoice method.

### 2.9.1 ADDITION METHOD

This method aggregates all the factors payments including profit to arrive at the total value addition on which the rate is applied to calculate the tax. This type of calculation is used mainly with income VAT. Addition method does not easily accommodate exemptions of intermediate firms. It is also not suitable for exempting export and valuation of import under destination principle. Another drawback of this method is that it does not facilitate matching of invoice for detecting evasion (Gayathri 2008).

#### 2.9.2 SUBTRACTION METHOD

This is the simplest method for computing VAT liability. The value added by the firm is arrived at by subtracting total purchases from sales. Tax is collected by applying the rate on the value addition. In the case of direct subtraction, tax is levied on the difference between the aggregate of sales and purchases which are both tax exclusive.

In intermediate subtraction tax is levied or the difference between tax inclusive values of purchases and sales. But tax credit method is generally preferred to subtraction method for the facility it offers for calculation export refund.

Thus, under is system, also the incidence of tax is at each stage and the incidence of tax on the final sale price to the consumer will remain the as in the earlier method. However, this holds good till the same rate of tax is attracted on all inputs, including consumables and services, added at all the stages of production/distribution. If the rates are not common, then the final tax by the two methods may differ. The method is being objected to by arguing that under this method, tax is levied on income. This value addition at each stage may not be only due to profit but may be partly due to freight/transportation and other services. The incidence of tax is on the sales of goods. However, the mode of calculation of taxable turnover is value added. Therefore the method cannot be said to be imposing on income/profit (Hassan, 2005).

#### 2.9.3 TAX CREDIT OR INVOICE CREDIT METHOD

The tax credit method or Invoice method is the most popular one accepted by majority of VAT operating countries. This method is widely used in conjunction with comprehensive VAT.

It allows for deduction of taxes paid on input from taxes payable on sales. This tax payable is calculated by deducting the aggregate of the taxes indicated on the invoice received for the purchase of input from tax to be paid on the sales.

This method is suitable even if intermediate firms in the chain of transaction are zero rated. Tax credit method gives total exemption to export through zero rating whereas subtraction method does not easily allow computing of the refund to be paid prior to export. It eliminates all differences in rates and full value added is taxed at last stage of transaction.

As far as import are concerned, under the destination principle, the full value can be taxed either at the time of import or at subsequent stages.

An important advantage of this method is that it readily allows matching of invoices preferably through computers which can detect tax evasion more efficiently. Unless the buyer and seller establish a nexus for sharing unaccounted profit, misrepresenting VAT liability on the invoice is beneficial to neither, as VAT is intended to be passed on to the ultimate consumer. But if the consumer does not collude with the retailer for under-invoicing detection of evasion is difficult in view of the interactable nature of individual transaction (Gayathri 2008).

#### 2.10 RATE STRUCTURE OF VAT

According to Hassan (2005), VAT can operate either with a single rate or with multiple rates. He said when multiple rates are used in addition to zero-rate, lower rates are prescribed for granting concessions. Multiple rates conveniently allow preferential treatment to certain commodities, firms or sectors and zero rate is normally applied to exempt mass consumption articles.

## 2.11 VAT FLAT RATE SCHEME (VFRS) IN GHANA

The government, in its vision of bringing rapid development to the nation and reducing poverty on a sustainable basis as articulated in by the GPRS I and II documents, has over the years consistently pursued tax reform policies geared towards the simplification of the compliance requirements of tax legislation in general.

It has encouraged, in particular, tapping into the immense revenue potential of the retail/informal sectors in the nation's collective effort to, in the medium to long term build a buoyant revenue mobilization base to entirely support government expenditure budgets thereby reducing support from development partners.

In consonance with this vision, and recognizing that, in an emerging economy like Ghana with low literacy and low record keeping capacities in the retail sector, the desired compliance requirement of the invoice credit scheme (i.e. standard VAT system) that has previously been used in the administration of VAT to the sector have not adequately been met. Also for this sector the perceived complexities of the invoice credit method of collecting

and accounting for the tax adds into the trader frustration and the difficulties of that afflict the administration of the tax within the sector.

# 2.11.1 DEFINITION SCOPE AND COVERAGE OF THE VAT FLAT RATE SCHEME

To give effect to the VAT Flat Rate Scheme (VFRS), the VAT amendment Act, 2007 (Act 734) which seeks to facilitate VAT/NHIL collection in the informal retail distributive trade sector, has amended the Parent Act in Section 3 (as amended), 24 and 76. (Operational Directive No 075/HQ)

The VAT Flat Rate Scheme is a VAT collection/accounting mechanism that applies a marginal tax rate of 3%, representing the net VAT payable, on the value of taxable goods supplied. It is an alternative to the invoice-credit method (or standard VAT system) which charges a given percentage on the sales (in this case 3%) for each transaction without recourse to input tax deduction.

The scheme is restricted to all retailers of taxable goods, except those authorized by the Commissioner of VAT Service to operate the invoice credit scheme and will operate concurrently with the current invoice credit method.

It is also worthy to note that as is the case under the invoice credit scheme, all exempt items under schedule 1 of the VAT Act as amended (e.g. agricultural inputs, essential drugs as approved by the Ministry of Health, mosquito nets, petrol, diesel, kerosene etc) shall remain exempt under the VFRS.

Thus the VFRS is not a separate tax handle or additional impost. It is only an amendment of the VAT Act (Act 546) with the principal aim of simplifying the VAT accounting system and consequently, deepening public faith and confidence in VAT administration in Ghana.

The use of a marginal tax rate of 3% for the VFRS, a rate which is effective VAT rate of the retail sector, makes it inappropriate for the inclusion of other sectors such as manufacturing and service sectors where value added could be as high as 100%

## 2.11.2 FEATURES OF THE VAT FLAT RATE SCHEME (VFRS)

The following are the main features identified with the VFRS.

- VFRS operators apply a marginal tax rate of 3% on the value of taxable supplies for each sale transaction.
- VFRS operators issue a simplified VAT/NHIL invoice for each sale
- They also submit a simplified monthly VAT/NHIL return forms which does not show input taxes.
- VFRS operators are not required to keep or maintain a separate register on input taxes and do
  not take credit for input taxes, but recover such input taxes as part of their costs in arriving at
  the selling price.
- VFRS operators are issued with the regular VAT Certificate of Registration upon registration.
- Minimal record keeping, to the extent that records are adequate in determining the correct VAT/NHIL payable to the VAT Service

#### 2.11.3 BENEFIT OF THE SCHEME

- The scheme is simple to operate, with simplified and easy to complete return forms, and will solve the problem at the informal retail level of what input tax one can or cannot claim, and will consequently curtail the submission of repayment returns (credit returns) by retailers.
- The simplicity of the scheme will encourage a lot more retailers who were hitherto not registered with the VAT Service to register. This will result in broadening the tax net and boost revenue collection.
- The scheme holds tremendous promise for the removal of compliance and enforcement barriers that currently plague the administration of VAT at the informal retail level where value added is least and the rate of non-compliance is highest.

(Gyimah-Asante 2007)

## 2.12 CONCEPTUAL FRAMEWORK

The contemporary view of taxation stems from the common premises that no one can be an island of himself. The struggle against poverty, crime, economic stagnation, etc., requires the combined effort of all and thus all must pay for it. Therefore in contemporary times taxation is defined as follows; Taxation is the practice whereby a state or government exacts contributions from its citizens or from the residents of the territory for the maintenance of the State machinery" (Goldsmith, 1951).

Hick, (1965), states that "A tax is a compulsory contribution from the person to government to defray the expenses incurred in the common interest of all without reference to a special benefit conferred." He added that "A tax is obligatory contribution of wealth of a person or body of persons for the service of the public powers."

By definition of the various authors, it is now clear that taxes are seen as compulsory extraction that involves personal obligations for common public purposes. Harley Lutz however, highlighted on this point when he noted that "the modern perspective in taxation is a product of the growing social cohesion and sense of common social obligation that have characterized human development during the last century. The underlying factor in the modern concept emphasizes the greater social unity and stronger sense of common burden and responsibilities, which are features of modern life".

Taxes are required to overcome the problem of free riding inherent in the financing of public goods to control other markets imperfections, and achieve social justice by redistribution. Economic growth ('efficiency") is promoted via the first set of goals, whereas social Justice ("equity") is promoted via redistribution and the provision and merit goods most notably health and education (Avi-Yonah and Margalioth, 2006,). An important purpose of taxation is therefore to generate adequate revenue to assist in the financing of government activities (Doyle, 2008).

According to Avi-Yonah and Margalioth, (2006), the share of non-tax revenue of total revenue is, on the average larger for developing countries than developed countries. Nevertheless, the main source of government revenue in developing countries, taken as a whole, is the tax system. Ghana's tax base remained narrow and in some cases inefficient and unfair to most taxpayers. The tax system was dependent on a few commodities, large companies and only few individuals. There was an urgent need to broaden the base; hence further attentions had to be given to the indirect tax regime. (Public Notice (PN1)

Value Added Tax (VAT) was introduced to replace the Sales and Service Taxes then administered by Customs Excise and Preventive Service (CEPS) and Internal Revenue Service (IRS) respectively. These taxes operated under different regimes and were not uniform for all taxpayers and also costly to administer. (PN1)

According the (PN 1) VAT brought Sales and Service Tax under one umbrella with a single positive rate to replace the multi-rate indirect tax regime (ranging from 10% to 15%) that earlier operated. This made the administration of the indirect tax system in the country simpler, fairer and more efficient.

Modern governments form an exceptional role to play in every nation. They have the task to protect the nation from internal chaos and external attack. They engage with various groups of people to be able to run the nation. Despite the general trend particularly in the twentieth century towards privatization, the preservation of the state apparatus, production capacity, health services, education, housing, among others, to a great extent depend on the governments.

#### **CHAPTER THREE**

#### **METHODOLOGY**

## **INTRODUCTION**

This chapter deals mainly with the sources of data collected, the research population, sampling techniques engaged and the sample size. In addition, the research instrument used in the data collection procedure and tools for data analysis were also discussed.

#### 3.1 STUDY AREA

The Okaishie Vat Sub Office has jurisdiction over the Ashiedu keteke Sub-District. This covers from Abossey Okai Mosque to Agbogbloshie, Graphic road to Obetsebi Lamptey circle, James town, High street, Tudu and the Central Business District which is made up of among others, Kantamanto, Opera square, Zongo Lane, Cow Lane, Timber market ,Makola and Okaishie. The study was concentrated on the Central Business District, because it is known to be the centre of retail trade in Accra.

#### 3.2 RESEARCH DESIGN

Research design constitute the blue print for the collection, measurement and analysis of data (Cooper and Schindler, 2006). It is a step by step plan that guides data collection and analysis (McCaston, 2005). The study is a survey research, designed in the form of a cross-sectional study of which data was collected once across the population. It is also a

comparative research. A comparative research compares two or more groups on one variable. The study compared revenue contribution of retailers who were operating under the Standard Rate (15%) before the introduction of the Vat Flat Rate Scheme (VFRS) and their contribution to revenue mobilization after they have were migrated to operate under the Flat Rate Scheme (3%).

Quantitative research methodology is chosen for this research because it attempts precise measurement of something (Cooper and Schindler, 2006). Quantitative data are data that have been collected and put into numeric form so that they can be counted. For example, the information gathered for a large scale survey can be added up and examined numerically, usually using percentage.

## 3.3 POPULATION AND SAMPLE

The target population is the aggregate of the cases about which the research would like to generalize. The target population is the unit for which the information is required and actually studied (Francis and Gyimah, 2007).

The sample size for the study was drawn from retailers in Central Business District (CBD) of Accra out of which there was a total population of 2,240. An investigation revealed that the area is clustered into business activities such as Hardware, Electricals, Cosmetics, Food, etc.

A sample size of 200 was allocated by means of Probability Proportion to Size (PPS) based on various categories of business activities.

**Table 3.1: Distribution of sample size** 

BUSINESS	ACTUAL SIZE	SAMPLE SIZE
ACTIVITY		
ELECTRICALS	512	46
HARDWARE	636	57
COSMETICS	410	36
FOOD	350	31
OTHERS	332	30
TOTAL	2,240	200

Source (VAT Service ISSU, March, 2011)

# 3.4 SAMPLING TECHNIQUE

Purposive sampling was used by the researcher. Purposive sampling technique was used to select the respondents. The researcher focused on traders that only operated under the Vat Flat Rate Scheme and also sort information on traders that once operated under the Standard Rate but now operates under the Flat Rate Scheme.

The researcher also used cluster sampling. The researcher realized that his target population were clustered in the study area and it made it easier for the researcher to get to his respondent.

#### 3.5 METHOD OF COLLECTING DATA

Two sources of data was used in the study. These are primary and secondary data. Primary data has the advantage of explaining what is going on in a particular social state of affairs (Saunders et al, 1997).

The researcher used secondary data obtained from the Information Support System Unit (ISSU), Research Monitoring and Planning Department, and the Okaishie Vat Sub Office(VSO) of the Vat Service. Secondary data is data collected by someone other than the user. Secondary data analysis saves time that would otherwise be spent collecting data and particularly in the case of quantitative data, provides larger and higher-quality data base than would be unfeasible for any individual researcher to collect on his own.

A benefit of using secondary data is that much of the background work has already been carried out. This means that secondary data generally have a pre-established degree of weight and have a dependability which need not be re-examined by the researcher who is using such data. Secondly secondary data can also be helpful in the research design of successive primary research and can provide a baseline with which the collected primary data results can be compared to.

## 3.6 DATA ANALYSIS AND PRESENTATION

The researcher used Statistical Package for Social Sciences (SPSS) table to present the data and descriptive statistics such as frequency distribution and percentages was used to analyze and t-test for measurement. This method was adopted by the researcher because it provides better clarification and the data collected and made very much valid. The analysis was done in three main parts as follows;

- 1. Analyses the combined data collected over the period 2005 to 2010 to ascertain if significant differences exists in the VAT collected from individuals,
- 2. Find out the relationship between total tax collected and total registration made for the period, 2007 to 2010.
- 3. Analyze the total flat rate collection from Okaishie Vat Sub Office over the period 2008 to 2010,
- 4. To compare the total Vat Collection to the flat rate collection for the same period, 2008 2010,
- 5. Analyze the responses collected from tax payers over the effectiveness of the VFRS in Tax revenue.

Three main statistical tools were used to extract relevant information for the four sub – sections listed above. Below are reviews for;

- 1. Comparing two or more population values using Kruskal Wallis Test.
- 2. Time Series analysis

Suppose that  $\bar{x}_1$ , is the mean of a sample of size  $n_1$  drawn from a normal population with mean  $\mu_1$ , and variance  $\sigma_1^2$ ; and that,  $\bar{x}_2$  is the mean of another sample of size  $n_2$  drawn from a normal population with mean  $\mu_2$  and variance  $\sigma_2^2$ . Then the means of the two populations could be tested to find out if significant differences exist between the two set of data. A normal population is that whose histogram is "bell – shaped", in other words not skewed towards any side.

Inferences could also be made about the differences between two population proportions. In this case,  $p_1$  represents the proportion of the first sample and  $p_2$  represents the

proportion of the other sample. A comparison can then be made to see if the two proportions are same or not.

Analyses of variance (single factor) allow the statistics practitioners to compare two or more independent populations of interval data. The procedure works by analyzing the variances of the populations in question, hence the name. Thus the technique analyze the variance of the data to determine whether we can infer that the population means differ. If it is ascertained that differences exist, a multiple comparison method would now be used to tell where the differences exist.

When it is concluded that in an analysis of variance (single factor) at least two treatment (population) means differ, it is often needed to know which treatment means are responsible for these differences. There are several statistical inference procedures that deal with this problem. Fisher's Least Significant Difference (LSD) method is a multiple comparison method used to determine the differences.

A simple way of determining whether differences exist between each pair of population means is to compare the absolute value of the difference between their two sample means and the LSD. That is, it would be concluded that  $\mu_i$  and  $\mu_j$  (the means of two populations) differ if  $|\bar{x}_i - \bar{x}_j| > LSD$ . Where  $\bar{x}_i$  and  $\bar{x}_j$  are the sample means of the two pairs being compared.

All inferences above require that the data be normally distributed. When data does not conform to this normality requirement, testing differences between populations is best done using non parametric test of Kruskal – Wallis test. The test, just like the equal mean test and

the single factor ANOVA, seeks to establish if significant differences exist between the populations in question.

In all the analyses to done, the decision as to whether significant difference exist depends on the p – value association with the test. It is the smallest level of significance for which the observed data would call for the rejection of the null hypothesis. In this case, a decision of differences existing in the data would be arrived at if the p – value is significantly less than 0.05, in many statistical works.

Another statistical tool that shall be of interest to this work is time Series analysis. It is a collection of data recorded over a period of time - usually weekly, monthly, or quarterly, or any variable that is measured over time sequentially. The objective of doing any time series analysis is to detect patterns that will enable us to forecast future values of times series.

#### **CHAPTER FOUR**

### DATA ANALYSIS AND DISCUSSION OF RESULTS

## **INTRODUCTION**

This chapter focuses on analysis of both secondary and primary data collected from the Okaishie Vat Sub Office to meet the demands of the objectives of this study. The raw data was inputted into excel spreadsheet and SPSS for various statistical analyses to be carried out.

## 4.1 Analyses VAT Collected from retailers For the Period 2005 To 2010

There are two motives to be met under this section; first, is to assess the collections over the period and secondly, to compare 2005 to 2007 and 2008 to 2010. The first thing to do is to first plot histograms to both check the normality requirement and assess tax collection for each year. This is a data of retailers that were migrated to operate under the Flat Rate Scheme when it was introduced. The data was vetted to match retailers who have been active throughout the years from 2005 to 2010. 396 retailers were matched.

Table 4.1: Distribution of 2005 Retailers Tax Collection (GH¢000)

Range of Tax up to	No. of traders	Cumulative	Cumulative Percentage
0-938	285	285	71.97
939-1,877	50	335	84.60
1,878-2,816	16	351	88.64
2,817-3,755	14	365	92.17
3,756-4,694	3	368	92.93
4,695-5,633	4	372	93.94
5,634-6,572	2	374	94.44
6,573-7,511	6	380	95.96
7,512-8,450	4	384	96.97
8,451-9,389	1	385	97.22
9,390-46,899	11	396	100.00

Source (Vat Service, ISSU 2011)

The analysis in table 4.1 showed that in 2005 majority of the retailers (285) paid up to GHC 938 and 11 retailers paid up to GHC 46,899. This implies that only a few retailers (10%) contribute a bulk of the revenue from the retailers. It could be seen that up to 365 (92.17%) entities have paid up to GH¢ 3,755 tax in the Okaishie Vat office. This is the reason why the histogram is skewed to the left.

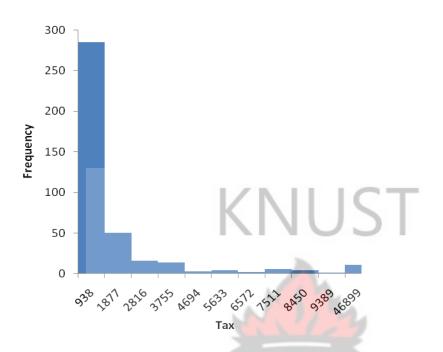


Figure 4.1: Histogram of Tax Paid for 2005

The histogram in figure 4.1 suggests that there were more entities paying taxes less than or up to GH¢ 4,694 than those paying tax above that threshold.

Table 4.2: Distribution of 2006 Retail Tax Collection (GH¢000)

Range of Tax up to	No. of traders	Cumulative	Cumulative Percentage
0-938	273	273	68.94
939-1,877	56	329	83.08
1,878-2,816	22	351	88.64
2,817-3,755	9	360	90.91
3,756-4,694	8	368	92.93
4,695-5,633	4	372	93.94
5,634-6,572	2	374	94.44
6,573-7,511	0	374	94.44
7,512-8,450	3	377	95.20
8,451-9,389	2	379	95.71
9,390-31,289	17	396	100.00

Source (Vat Service ISSU March 2011)

Table 4.2 shows that, there are more entities (17) that paid tax more than GH¢ 31,289 as compared to 2005.

In figure 4.2, the histogram here, just as the 2005 one, is skewed to the left but with almost the same number of entities paying tax up to GH¢4,694. So it could be said that, on a whole, 2006 has been a little better in terms of tax revenue at the Okaishie VAT office.

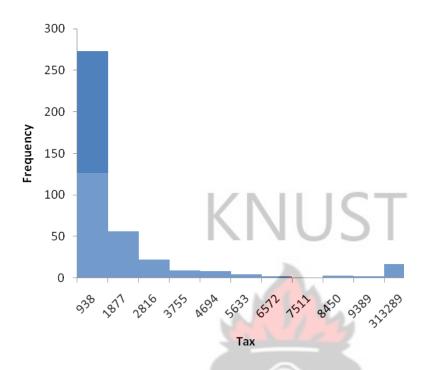


Figure 4.2: Histogram of Tax Paid for 2006

From table 4.3 below, the highest tax paid here is only greater than that for 2005 so far. It also has about the same number paying less than or up to GH¢4,694. That accounts for same in the histogram.

Table 4.3: Distribution of 2007 Retail Tax Collection (GH¢000)

Range of Tax up to	No. of traders	Cumulative	Cumulative Percentage
0-938	266	266	67.17
989-1,877	54	320	80.81
1,878-2,816	23	343	86.62
2,817-3,755	15	358	90.40
3,756-4,694	7	365	92.17
4,695-5,633	5	370	93.43
5,634-6,572	5	375	94.70
6,573-7,511	1	376	94.95
7,512-8,450	1	377	95.20
8,451-9,389	4	381	96.21
9,390-132,393	15	396	100.00

Source (Vat Service ISSU March 2011)

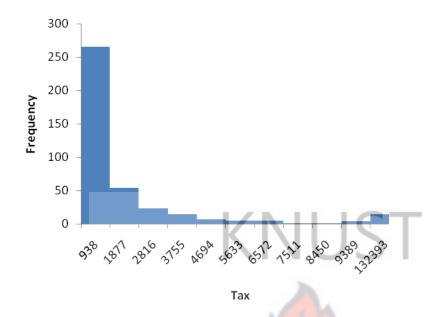


Figure 4.3: Histogram of Tax Paid for 2007

Table 4.4: Distribution of 2008 Retail Tax Collection (GH¢000)

-	Rang of Tax up to	No. of traders	Cumulative	Cumulative Percentage
_			J J J	
	0-938	279	279	70.45
	939-1,877	51	330	83.33
	1,878-2,816	11	341	86.11
	2,817-3, <mark>755</mark>	14	355	89.65
	3,756-4,694	8	363	91.67
	4,695-5,633	W3s	370	93.43
	5,634-6,572	6	376	94.95
	6,573-7,511	3	379	95.71
	7,512-8,450	3	382	96.46
	8,451-9,389	1	383	96.72
	9,390-78,021	13	396	100.00

Source (Vat service ISSU March 2011)

Table 4.4 shows that up to 2008, nothing appears significant different from the previous years, only that there is a slight percentage decrease in the number of entities paying tax less than or up to  $GH\phi$  4,694.

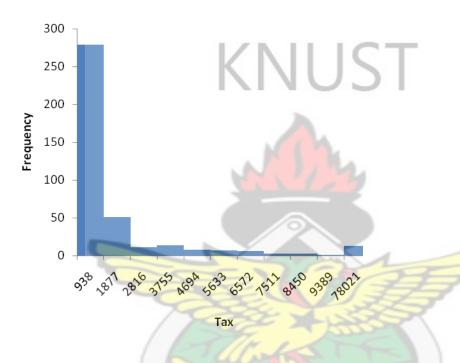


Figure 4.4: Histogram of Tax Paid for 2008

The histogram in figure 4.4 too did not look different; skewed to the left, but time with slightly, about 1% decrease in tax paid less than or up to GH¢ 4,694.

Table 4.5: Distribution of 2009 Retail Tax Collection (GH¢000)

Range of Tax up to	No. of traders	Cumulative	Cumulative Percentage
0-938	234	234	59.09
939-1,877	61	295	74.49
1,878-2,816	35	330	83.33
2,817-3,755	10	340	85.86
3,756-4,694	10	350	88.38
4,695-5,633	8	358	90.40
5,634-6,572	5	363	91.67
6,573-7,511	5	368	92.93
7,512-8,450	4	372	93.94
8,451-9,389	2	374	94.44
9,390-61,556	22	396	100.00

Source (Vat Service, March 2011)

Table 4.5 shows that 2009 tax year appears to have recorded lower number of entities paying tax less that or up to  $GH \not\in 4,694$ . It however is the first to have recorded the greater number of entities paying the highest tax. This is depicted in the histogram below.

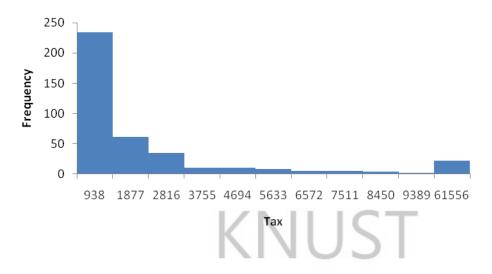


Figure 4.5: Histogram of Tax Paid for 2009

The histogram, in figure 4.5 however, has the same shape as those seen before.

Table 4.6: Distribution of 2010 Retail Tax Collection (GH¢000)

Range of Tax u <mark>p to</mark>	No. of traders	Cumulative	Cumulative Percentage
0-938	272	272	68.69
939-1,877	44	316	79.80
1,878-2,816	23	339	85.61
2,817-3 <mark>,755</mark>	12	351	88.64
3,756-4, <mark>694</mark>	3	354	89.39
4,695-5,633	7	361	91.16
5,634-6,572	3	364	91.92
6,573-7,511	8	372	93.94
7,512-8,450	3	375	94.70
8,451-9,389	2	377	95.20
9,390-51,327	19	396	100.00

Source (Vat Service ISSU, March 2011)

From table 4.6 above, the number of entities paying tax less than or up to GH¢ 4,694 has also decreased here, perhaps because we have still more paying the higher taxes.

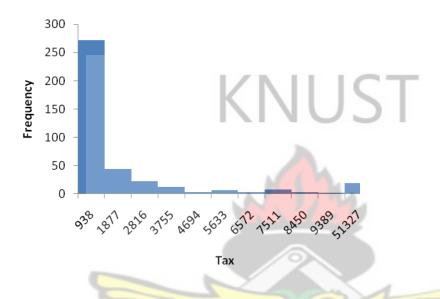


Figure 4.6: Histogram of Tax Paid for 2010

One critical reason for drawing the histograms is to ascertain the distribution and hence the normality requirement of the data. In all six histograms, it could be observed that the normality requirement has not been met. It could also be seen that not very much has changed in the taxes collected for the period, except for 2009 and 2010, where quite greater number of entities paid higher taxes. It would therefore be appropriate to perform a significant test for the data in general to ascertain the overall difference or otherwise in the data. Since the data are not normal, the Kruskal – Wallis is used to facilitate the comparison.

**Table 4.7: Test for Differences in Data** 

Group	Rank Sum	Observations
2005	424,204.0	397
2006	463,266.5	397
2007	473,370.5	397
2008	451,589.5	397
2009	543,041.0	397
2010	482,681.5	397
		L <sub>A</sub>
H Stat	W. 1	42.25
Df		5.00
p-value		0.00
Chi-squared Critical	SET	11.07

Source (Vat Service, March 2011)

In table 4.7, the appropriate statistical tool has revealed that, the differences in tax collection for the period are significant, since the p – value, 0.00, is far less than 0.05. Hence the conclusion is that, the amount of tax collected has been significantly different for the different years since 2005. Observing the rank sums, it could be seen that differences occur mostly in 2007, 2009 and 2010, being the years of higher taxes, 2006 and 2008 also being years of next higher in tax paid. The year that recorded the least in tax highs has been 2005. Since the data is not normal, averages for years would not be meaningful. It can also be said that the total tax from the retailers from 2008 to 2010 is more than the tax collected from 2005 to 2007 by 8.56%, implying that more tax was collected under the Flat rate scheme.

## 4.2 Relationship between Flat rate Tax and newly registered retailer Population

The data for total tax revenue for the various years during the period under study is presented below for analyses;

**Table 4.8: Total Flat Rate Tax Verses retailer Population** 

Year	Trader Population	Percentage Increase or decrease	Total Tax (GH¢)	Percentage Increase or decrease
2007	467	· M	82,364.94	
2008	1,783	73.8	351,069.08	76.5
2009	1,766	-0.95	670,207.64	47.6
2010	1,741	-1.42	887,546.76	24.5
Total	5,757	122	1,991,188.42	

Source (Vat service ISSU, March 2011)

Table 4.8 has revealed that trader (retailers) population has increased dramatically from 2007 to 2008, indicated more retailers willingly registered with the Vat service thereby expanding the tax net. It decreased by 0.95% in 2009 and further decreases by 1.42% in 2010. This implies that some retail businesses collapsed and were deregistered. Total Flat rate tax however, has been increasing since 2007. This implies that the fluctuations

experienced by registration of traders during the period of 2007 and 2010, have not had any negative effect on the VFRS at all.

## 4.3 Total Flat Rate Collection from Okaishie the Over the Period 2008 To 2010

The data on the flat rate tax collections could be analyzed by first looking at it as a time series data generated for the three years. A time series plot could reveal patterns that might be in the data and hence determine the seasonal (yearly) indexes. The seasonal indexes would tell the months in which overall tax went above or below the yearly average. It would also reveal the general pattern exhibited by the time series. Figure 7 below is the time series plot.

It could be seen in figure 4.7, that the general pattern of the tax over the years has been an increasing one with seasonal effects occurring intermittently. There were occasional rise and fall within the period. Within a year, there have been decreases occurring mostly in the ninth to the tenth months. It must also be realized that the all time high happened in the sixth to the seventh month in the first year (2008). The seasonal indexes are as follows.

TAX

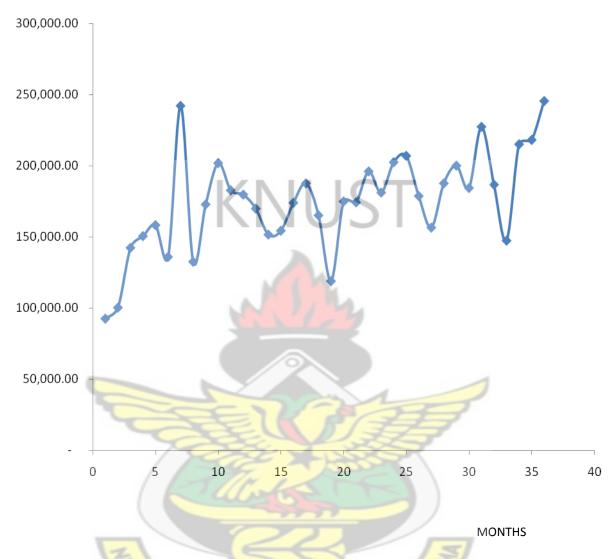


Figure 4.7: Time Series Plot for VFRS for 2008 to 2010

The seasonal indexes in table 4.9 have shown that, on average, tax collected for April, May, July, October, November and December were above the annual average by 0.71%, 6.05%, 13.54%, 13.44%, 6.02% and 12.44% respectively. Other months have recorded tax values generally below the annual average by those values in the table. The lowest tax values were recorded for the month February and the highest have been generally in July and October.

The analysis would also want to find out whether significant differences exist in tax values for the various months. Below are the histograms.

Table 4.9: Seasonal Indexes for VFRS, 2008 to 2010 Okaishie VSO

Season	Index	Percentage Perc	centage Increase Or Decrease
1	0.9321	93.21	6.79
2	0.8531	85.31	14.69
3	0.9068	90.68	9.32
4	1.0071	100.71	0.71
5	1.0605	106.05	6.05
6	0.9292	92.92	7.08
7	1.1354	113.54	13.54
8	0.9233	92.33	7.67
9	0.9336	<mark>93.</mark> 36	6.64
10	1.1344	113.44	13.44
11	1.0602	106.02	6.02
12	1.1244	112.44	12.44

Source (Vat service March 2011)

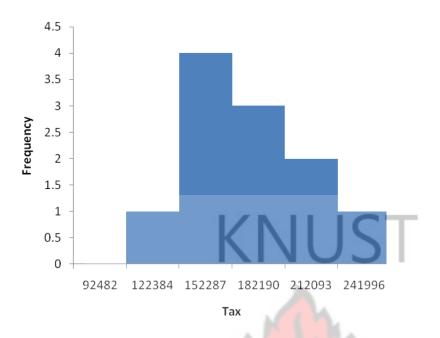


Figure 4.8: Histogram of VFRS Paid for 2008

From figure 4.8 VFRS tax collected for the year 2008 is quite normal with total monthly payments around GH¢ 152,287 and the lowest being around GH¢ 92,482.

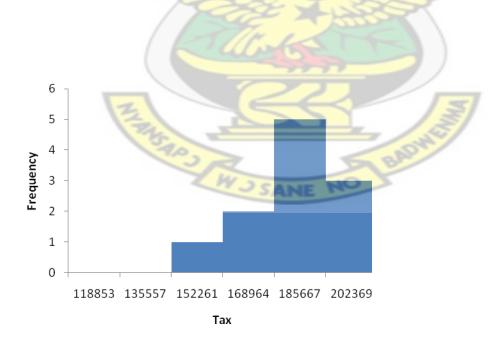


Figure 4.9: Histogram of VFRS Paid for 2009

The VAT flat rate tax collected for 2009 as shown in figure 4.9 is skewed to the left, showing that there were more monthly payments towards high values, GH¢185,667. This shows that 2009 has been the best among the two years, 2008 and 2009. It could be remembered this trend was identified in the time series plot as being a generally increasing pattern.

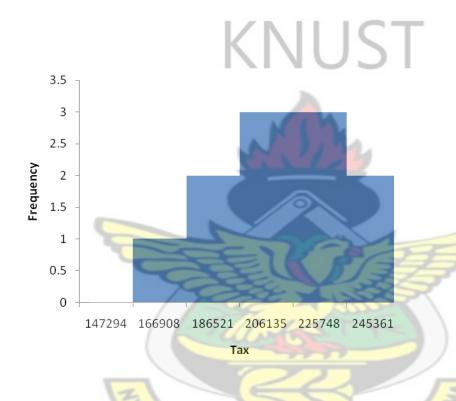


Figure 4.10: Histogram of VFRS Paid for 2010

The 2010 tax year in figure 4.10 is obviously the best, since it quite normal too with total monthly payments higher values hovering around GH¢ 206,135 and GH¢ 225,748. So far, differences appear to be in the yearly tax collection for the three years. The Kruskal – Wallis test would seek to establish this with statistical evidence.

Table 4.10: Test for Differences total Okaishie VFRS collection for 2008, 2009 and 2010

Group		Rank Sum	Observations	
	2008	159.0	12	
	2009	203.5	12	
	2010	303.5	12	
H Stat			8.22	ST
Df			2.00	
p-value			0.02	,
Chi-square	ed Critical		5.99	

Source (Vat Service, RM&P March 2011)

In table 4.10 the p – value, 0.02 suggests strongly that differences exist in the three set of data for the yearly VAT flat rate tax collected monthly for Okaishie district. It further, by the rank sums revealed that these differences were brought about as a result of increasing values recorded for the period. This has made 2010 to be the best total collection ever, followed by 2009 and then 2008.

# 4.4 Percentage VFRS of Total Tax

Here the research seeks to assess the percentage of all taxes collected for the period 2008 to 2010 that representing the VAT flat rate. The table below contains the percentage of the total tax that is representing flat rate.

Table 4.11: Percentage VFR Tax of Total Tax of Okaishie VSO

Month	Percentage(2008)	Percentage(2009)	Percentage(2010)
January	37.14	32.01	22.93
February	30.08	29.63	18.85
March	16.47	35.58	25.19
April	26.65	28.36	19.96
May	23.32	34.40	25.34
June	28.29	28.94	20.64
July	29.48	26.17	24.00
August	15.72	38.67	30.39
September	38.98	33.49	22.60
October	32.29	26.09	28.64
November	42.65	17.87	26.74
December	29.40	31.97	30.49

Source (Vat service Okaishie VSO March, 2011)

Figure 4.11 above shows that, the highest percentage has been 42.65 and the least being 15.72 of the total tax collected for 2008. This analysis shows that even though the flat

rate tax collected is increasing over the years its percentage to the total tax collected is below 50%.

## 4.5 The Effectiveness of the VFRS in Tax Revenue

To achieve this objective, questionnaire was administered to 157 businesses for their responses about the VAT system. Below are the analyses of various responses that meet the demand of this objective.

Table 4.12: Length of Stay with the VAT Service

	Frequency	Percent
Under 1 year	10	6.4
2-5 years	90	57.3
6-8 years	41	26.1
Above 9 years	15	9.5
Total	156	99.4
Missing Value	1	0.6
Total	157	100.0

Source (Field Data April 2011)

Table 4.12 has shown that, majority (57.3%) of businesses have been with the VAT service for two to five years and about 36% have been operating with the service for at least six years. The distributions of the length of service with the VAT service would mean that

there are a good number of businesses that have experience with the service and hence be able to respond to the effectiveness of the service.

**Table 4.13: Category of Business** 

	Frequency	Percent
Electricals	32	20.4
Hardware	31	19.7
Cosmetic	33	21.0
Food	30	19.1
Other	31	19.7
Total	157	100.0

Source (Field Data April 2011)

Table 4.13 shows that the distribution of business category is normal. This implies that there is almost equal number of respondents from all categories. This would ensure that responses are not skewed towards any particular business category.

From table 4.14 below, the respondent's understanding of the VAT system appears not to be good enough. This is because majority (about 54%) have rated their understanding as average. There are also some 32% that say they have good understanding. Of critical

interest would be to find out which of the category of respondents have good understanding, and which ones have average or poor understanding.

Table 4.14: Respondent's Understanding of the VAT System

	Frequency	Percent	÷
Poor	9	5.7	l
Average	84	53.5	
Good	50	31.8	
V. Good	11	7.0	
Total	154	98.1	
Missing Value	3	1.9	5
Total	157	100.0	3

Source (Field Data April, 2011)

Table 4.15: Gender and Understanding for VAT System

				P	
	Poor	Average	Good Ve	ery Good	Total
Male	5	38	36	10	89
Female	4	45	14	1	64
Total	9	83	50	11	153

It could be seen in table 4.15, that male respondents do have better understanding of the system than their female counterparts. Female respondents, at best, have average understanding of the VAT system.

LANTICE

Table 4.16: Business Category and Understanding of VAT System

	Poor	Average	Good	Very Good	Total
Electricals	0	12	17	1	30
Hardware	1	14	10	6	31
Cosmetic	4	18	8	3	33
Food	2	19	8	0	29
Other	2	21	7	1	31
Total	9	84	50	11	154

Source (Field Data April, 2011)

In table 4.16, with the exception of Electricals and Hardware businesses, all others categories appear to have average understanding of the VAT system. More businesses in the Electricals and Hardware categories have better understanding of the system than other business types. One would want to find out which variable is bringing about the variation in understanding in the VAT system.

**Table 4.17: Educational Background of Respondents** 

	Frequency	Percent
None	1	.6
Primary	6	3.8
Secondary	97	61.8
Tertiary	13	8.3
Others	37	23.6
Total	154	98.1
Missing Value	3	1.9
Total	157	100.0

Source (Field Data April, 2011)

Table 4.17 has revealed very much variation in the educational background of the respondents. Majority of them had secondary school education with only about 8% having tertiary education. It is no doubt the educational level could be the variable bringing about the variation in understanding the VAT system.

From table 4.18, up to 79% of the respondents say the computation of the VAT Flat Rate is simple. It is one of the reasons why their registration was met with no resistance.

**Table 4.18: Simplicity of VFRS** 

2	1.3
29	18.5
114	72.6
10	6.4
155	98.7
2	1.3
157	100.0
	29 114 10 155 2

Source (Field Data April 2011)

Table 4.19: Level Playing Field of VFRS

	Frequency	Percent
Strongly Disagree	10	6.4
Disagree	41	<b>2</b> 6.1
Agree	100	63.7
Strongly Agree	4	2.5
Total	155	98.7
Missing Value	2	1.3
Total	157	100.0

Source (Field Data April 2011)

Table 4.19 above shows that, even though about 33% of the respondents do not think that the VFRS has brought about a level playing field, some 64%, being the majority, thinks otherwise. This implies that there are some more retailers that have not been registered. This could push the registered traders to under declare the collected. This is because most of the traders buy from the suppliers therefore it would not be fair others are not registered.

Table 20 and 21 below provide the rating of some practices that pertains to the general operation of these businesses in respect to taxing and invoicing. These operations are;

- 1. Addition of 3% to price of item before selling, and
- 2. Issuing of VAT invoice to cover all business activities.

The respondents were asked to rate responses using the scale;

- 1. Strongly Disagree
- 2. Disagree
- 3. Agree
- 4. Strongly Agree

Table 4.20: Addition of 3% to Price of Item before Selling

	Frequency	Percent
Strongly Disagree	42	26.8
Disagree	68	43.3
Agree	31	19.7
Strongly Agree	15	9.6
Γotal	156	99.4
Missing Value	1	.6
Total	157	100.0

Source (Field Data April, 2011)

The analysis in table 4.20 shows that 29% of respondents add the 3% flat rate to their price before selling the item to consumers. This could be ascribed to the findings in table 4.14 which shows that most to the retailers have an average understanding of Vat and for that matter the VFRS. This implication of this is that most traders would have to pay the vat from their earnings which will have an effect on their business. For the traders to still be in business they would have to under declare the tax collected thereby reducing government revenue. This could be the reason why analysis in tables 4.1 to 4.6 show that a bulk of the tax was paid by a small percentage of the traders.

**Table 4.21: Issuing of VAT Invoice to cover all Business Activities** 

	Frequency	Percent
Strongly Disagree	4	2.5
Disagree	87	55.4
Agree	60	38.2
Strongly Agree	4	2.5
Total	155	98.7
Missing Value	2	1.3
Total	157	100.0

Source (Field Data April, 2011)

Table 4.21 above shows that, about 58% of the respondents say they do not issue VAT invoice to cover all business activities. Non-issuance of the Vat invoice creates the condition for the trader to under declare the tax collected. The vat invoice is the only invoice a registered trader is to issue to customers, therefore if a trader does not issue it, the implication is that the trader is under declaring the tax paid to the service.

## 4.6 SUMMARY OF ANALYSIS

The following constitute the summary of the data analysis;

1. Up to 365 (92.17%) entities have paid up to GH¢3,755 tax in the Okaishie Vat office in 2005.

- 2. There were more entities paying taxes less than or up to GHS 4,694 in 2005 than pay more than  $GH\phi$  4,694.
- 3. On a whole, 2006 has been a little better in terms of tax revenue at the Okaishie VAT office.
- 4. Up to 2008, nothing appears significantly different from the previous years. Only that there is a slight percentage decrease in the number of entities paying tax less than or up to GH¢4,694.
- 5. The amount of tax collected has been significantly different for the different years since 2005.
- 6. Differences occur mostly in 2007, 2009 and 2010, being the years of higher taxes, 2006 and 2008 also being years of next higher in tax paid. The year that recorded the least in tax highs has been 2005.
- 7. The fluctuations experienced by registration of traders during the period of 2007 and 2010, haven't had any negative effect on the VFRS at all.
- 8. The general pattern of the tax over the years has been an increasing one with seasonal effects occurring intermittently. There were occasional rise and fall within the period.
- 9. Within a year, there have been decreases occurring mostly in the ninth to the tenth months. It must also be realized that the all time high happened in the sixth to the seventh month in the first year (2005).
- 10. On average, tax collected for April, May, July, October, November and December were above the annual average by 0.71%, 6.05%, 13.54%, 13.44%, 6.02% and 12.44% respectively.
- 11. Other months have recorded tax values generally below the annual average.

- 12. The lowest tax values were recorded for the month February and the highest have been generally in July and October.
- 13. VFRS tax collected for the year 2008 is quite normal with total monthly payments around  $GH\phi$  152,287 and the lowest being around  $GH\phi$  92,482.
- 14. The VAT flat rate tax collected for 2009 shows that there were more monthly payments towards high values, GH¢ 185,667.
- 15. 2009 has been the best among the two years, 2008 and 2009.
- 16. The 2010 tax years is obviously the overall best with total monthly payments higher values hovering around GH¢ 206,135 and GH¢ 225,748.
- 17. Differences exist in the three set of data for the yearly VAT flat rate tax collected monthly for Okaishie Vat Sub Office.
- 18. The highest percentage of VFRS tax off the total tax collected has been 42.65% and the least being 15.72% and that occurred in 2008.
- 19. Majority (57.3%) of businesses have been with the VAT service for two to five years and about 36% have been operating with the service for at least six years.
- 20. This implies that there is almost equal number of respondents from all business categories.
- 21. The respondent's understanding of the VAT system appears not to be good enough.
- 22. Majority (about 54%) have rated their understanding as average.
- 23. Male respondents do have good understanding of the system than their female counterparts.
- 24. Female respondents, at best, have average understanding of the VAT system.

- 25. With the exception of Electricals and Hardware businesses, all others categories appear to have average understanding of the VAT system.
- 26. There are more businesses of Electricals and Hardware with good understanding of the system than other business types.
- 27. Majority of the respondents had secondary school education with only about 8% having tertiary education.
- 28. Up to 79% of the respondents say the VAT Flat Rate System makes computations of VAT simple.
- 29. Even though about 33% of the respondents do not think that the VFRS has brought about a level playing field, some 64%, being the majority, thinks otherwise.
- 30. 29% of respondents add the 3% flat rate to their price before selling the item to consumers.
- 31. About 58% of the respondents say they do not issue VAT invoice to cover all business activities.

### **CHAPTER FIVE**

### CONCLUSIONS AND RECOMMENDATIONS

This is the concluding chapter of the study. Conclusions drawn were based on the entire findings from the study. The main findings were to show whether the introduction of the Vat Flat Rate Scheme has had any influence on the tax revenue. Some recommendations were made in respect of the findings that were made from the study.

### 5.1 CONCLUSION

The study showed that, there was a significant difference between the paid by the retailers when they operated under the standard rate (15%) from 2005-2007 and when they operated under the flat rate (3%) from 2008-2010. It showed that revenue collected from 2008-2010 was 8.6% more than revenue collected from 2005-2007.

Also revenue collection from retailers increased over the period since the introduction of the VFRS. However its percentage to total tax collected is below 50% despite the increase in the retail population. The study further revealed that about 10% of the retailers collect about 90% of the total tax collected from the retailers. The study further showed the most of the retailers did not add the 3% to their prices nor issue vat invoice to their customers. This practice leads to under declaration of the tax collected.

The study also showed that the retail population increased significantly thereby expanding the tax net. Also to a large extent the introduction of the VFRS has created a level playing field for the retailers. Most retail found the computation of the Vat Flat Rate more simple compared to the computation of the Standard Rate.

## 5.2 **RECOMMENDATIONS**

Following the conclusions made, the researcher came out with the following recommendations.

Frequent monitoring and compliance exercises such as invigilation, visiting the traders to find out if they are complying with the Vat regulations or not should be conducted by the enforcement unit. These would prevent the trader from under declaring the tax collected. Also Control and Verification (CV) or auditing of the traders should be regular in order to uncover the taxes that have been under declared. Offending traders should be prosecuted as state in Section 57 of the Vat Act, Act 547.

To further expand the tax net, periodic registration exercises should be conducted to register newly established businesses. The service should also collaborate with the Registrar General's Department in order to be able to provide prompt information such as location traders and their business activities on traders to enable the service register these businesses. Traders that refuse to register with the Vat Service are to be sanctioned as stated in Section 56 of the Vat Act, Act 546.

Regular education of the retailers should be embarked on to further enhance their understanding of the VAT. The education of the traders should also emphasis on the Vat Act, informing the traders on the implication of going against the law. This could take the form of seminars, one on one education where the staff of Vat Service would visit the retailers in their shops to find out what their problems are facing and educate them on how to overcome these problems and to make the traders aware of current events.

#### REFERENCES

Auriol, E. & Warlters (2005) Taxation Based in Developing Countries, *Journal of Public Economics*, Vol 89, Issue 4, page 625–646

Avi-Yonah, R. & Margalioth, Y. (2006) Taxation in Developing Countries: Some Recent Support and Challenges to the Conventional View.

Baunsgaard, T. & Keen, M. (2005) *Tax Revenue and Trade Liberalization* IMF Working Paper No. 05/112.

Bernardi L, Profeta, P. & Tanzi V. (2003) Tax systems and tax reforms in Europe. New York: Routledge

Bird, R. M. & Zolt, E. M. (2003) *Introduction to Tax Policy Design and Development*. A draft prepared for a course on Practical Issue of Tax Policy in Developing Countries, World Bank.

Bird, R. (2005) *Value-Added Taxes in Developing and Transitional Countries*: Lessons and Question. Andrew Young School of Policy Studies, Georgia University, International Studies Program Working paper 05-05

Bird, R. M. & Gendron, P. P. (2007) *Tax systems in Developing and Transitional Countries*. Cambridge, UK: Cambridge University Press.

Bird, R. M. (1993) Review of Principle and Practice of Vat Lessons for Developing Countries, Canadian Tax Journal 41 No 6:1222-5

Brautigam, D., Fjeldstad, O. H. & Moor, M. P. (2008) *Taxation and State Building in Developing Countries*: Capacity and Consent, Cambridge: Cambridge University Press.

Brennan, G. & Buchanan, J. M. (2006) *The Power to Tax*: Analytical Foundation of a Fiscal Constitution. Cambridge University Press, London.

Buehler, A. G. (1948) *Public Finance* McGraw Hill Book Company Inc, New York.

Cnossen, S. (2006) Excise Tax Policy and Administration in South African Countries Unisa Press, Pretoria

Cnossen, S. (2004) Reform and Coordination of Corporation Taxes in the EU: *An Alternative Agenda Bulletin for International Fiscal Documentation* 58, pp.134-150

Croome, B. J. (2008) *Taxpayers' Right in South Africa*: An Analysis and Evaluation of the Extent to which the Powers of the South African Revenue Service Comply with the Constitutional Rights to Property, Privacy, Administrative Justice, Access to Information *and Access to Courts, a thesis submitted for the degree of Doctor of Philosophy*, University of Cape Town

Di John, J. (2006) *The Political Economy of Taxation and Tax Reforms in Developing Countries* UNU WIDER Research Paper (No. 2006/74), Helsinki, Finland: UNU World Institute for Development Economic Research

Dosser, D., (1981) *The Value Added Tax in the UK and the EEC in Peacock*, A. and F. Fort (Eds.), the Political Economy of Taxation, Oxford, UK: Basil Blackwell

Doyle, G. A. (2008) *Irish Taxation*: Law and Practice Irish Taxation Institute, Dublin.

Due, J. F. (1988) *Indirect Taxation in developing economies*: The Role and Structure of Customs. Baltimore, MD: John Hopkins University Press.

Ebrill, L., Keen, M., Bodin, J. P. & Summers, V. (2001) *The Modern VAT*, Washington DC: International Monetary Fund.

Economy Watch (2011) *Value Added Tax (VAT) Definition* available at www.economywatch.com/business-and -economy/defination.htm

Francis, N. & Gyimah-Brempong, E. (2007) Education, Evaluation, Methodology

Gayathri, L. (2008) Value Added Tax Voice of Change, issue 23, pp 3. www.sandsca.com

Gillia, M., Shoup, C. S., & Sicat, G. P. (1990) *Value Added Taxation in Developing Countries*, Washington DC: The International Bank for Reconstruction and Developing.

Gloppen, S. & Raknern, L. (2002) *Accountability through Tax Reforms Reflections from Sub-Saharan African*, IDS Bulletin, Vol. 33, No.3 pp. 30-41

Gupta, A. S. (2007) *Determinants of Tax Revenue Effort in Developing Countries:* IMF Working Paper (WP/07/184), Washington DC: International Monetary Fund

Gyimah-Asante, K. (2007) VAT Flat Rate Scheme In Perspective, The Statesman: Special Reports.

Hepker, M. Z. (1973) A Modern Approach to Tax Law Butler and Tanner Limited, London

Hicks, J. R. (1965) *Capital and Growth*, Oxford: OUP.

Holmes, K. (2001) *The Concept of Income*: A *Multi-Disciplinary Analysis*. A thesis submitted for the Degree Doctor of Philosophy, Victoria University of Wellinton Published by IBFD Publication BV

Kalton, G. (1983) Compensating for missing survey data. Institute of Social Research.

Katz, M. M. (1994) Interim Report of the Commission of Inquiry into Certain Aspect of the Tax Structure of South Africa, Government Print, Pretoria

Keen, M. (2007) *VAT Attacks* IMF Working Paper (WP/07/142), Washington DC: International Monetary Fund

Khalilzadeh-Shirazi, J., & Shah, A. (1991) *Tax Policy in Developing Countries*, A World Bank Symposium, Washington DC: The International Bank for Reconstruction and Development/The World Bank

Levi, M. (1988) Of Rule and Revenue, London: University of Califonia

Mack, E. (2002) *Self–Ownership, Taxation and Democracy:* A Philosophical-Constitutional Perspective in Racheter and Wagner (eds) Politics, Taxation, and the Rule of Las: The Power to Tax in Constitutional Perspective Kluwer Academic Publishers. London

Mahon, J. E. (2004) Causes of Tax Reform in Latin America, 1977-95, *Latin American Research Review*, Vol.39, No. 1, pp. 3-30

Margo, C. S. (1986) Report of the Commission of Inquiry into Fiscal Structure of the Republic South Africa, (RP 34/1987) Government Printer, Pretoria.

Matthias, W. & Udo, L. (2003) *Institutional Strengthening of the Tax System in Ghana*, GTZ, <a href="http://www.gtz.de">http://www.gtz.de</a>

Minh Le, T. (2003) *Valued Added Tax*: Mechanism, Design and Policy issues. Washington DC

Moore, M. P. (2008) *Between Coercion and Contract: Competing Narratives on Taxation and Governance in Brautigam*, Fjelstad and Moore (eds) Taxation and State Building in Developing Countries: Capacity and Consent Cambridge University Press, New York

Moore, M. P. (2004) *How does Taxation affect the Quality of Governance IDS* Working Paper (No 280), Sussex, UK: Institute of Development Studies

Moore, M. P. (2004) *Taxation and the Political Agenda*, North and South Revised Paper for Forum for Development Studies, Sussex, UK:

Gayathri, L. (2008) Value Added Tax: Voice of Choice 23 pp 3-5 http://www.sandsca.com

Musgrave, R. A. (2000) *Public Finance in a Democratic Society*, Vol. III Edward Elgar, Northhampton.

Newbery, D. & Stern, N. (1987) The Theory of Taxation for Developing Countries, Oxford University Press for the World Bank

*Operational Directive*, No 075/HQ, (2007) The VAT Flat Rate Scheme (VFRS) Implementation Guidelines.

Rawls, J. A. (1971) Theory of Justice, Harvard University Press. Cambridge

Riley, C. A. (1991) *Studies in Law Reforming Inheritance Tax:* The Search for an End and a Means (a Series of Occasional Papers) Hull University Law School.

Sarndal, C. E, Swenson, B., & Wreman, J. H. (1992) *Model Assisted Survey Sampling*, Springer-Verlag, New York.

Saunders, M., Lewis, M., & Thornhill, A. (1997) *Research Method for Business Students*, Financial Times: Pitman Publishing.

Seligman, E. R. A. (1969) Essays in Taxation, Augustus M. Kelley Publishers, New York

Smith, A. (1776) *An inquiry Into the Nature and Causes of the Wealth of Nations*, available at http://www.adamsmith.org

Steenekamp, T. (2008) *Introduction to Taxation and Tax Equity in Black*, Calitz and Steenekamp (eds) Public Economics Oxford University Press: South Africa, Cape Town

Tait, A. M. A. (1988) *Value Added Tax International Practice and Problem*: International Monetary Fund.

The Budget Statement and Economic Policy of the Government of Ghana, (2000) pg 10.

Thuronyi, V. (2003) *Comparative Tax Law*: Kluwer law International, The Hague ISBN-10:9041199233

Toye, J. & Moore, M. P. (1998) *Taxation, Corruption, and Reforms*, Robinson, M. (ED.), Corruption and Development, London: Frank Cass

Tseng, W. & Fisher, M. (2004) *Article IV Consultation*: India IMF County Report (05/86), Washington DC: International Monetary Fund, available at http://www.imf.org/external/pubs/ft/scr/2005/cr0586.

Wagner, R. E. (1973) *Death and Taxes*, Some Perspectives on Inheritance, Inequality, and Progressive Taxation: American Enterprise Institute for Public Policy Research, Washington D.C.

World Bank, (2001) Introducing Value Added Tax: Lesson from Ghana, *Prem Notes* No 61 Washington DC: World Bank.

ANSAPS PW S

# APPENDIX A

# RESEARCH QUESTIONNAIRE FOR VAT REGISTERED RETAILERS

This questionnaire is design to research into how effective the VFRS has been to improving tax revenue. You are kindly requested to give your candid answers to the questions below. Information given shall be treated with utmost **confidentiality**.

SEC <sub>1</sub>	TION A: PROFILE OF RESPONDENT
1)	Gender: Male [ ] Female [ ]
2)	Educational Background
-/	None [ ] Primary [ ] Secondary [ ] Tertiary [ ] Others [ ]
2)	N ( )
3)	How long have you been registered with VAT Service
	a) Under 1 year [ ] b) 2-5 years [ ] c) 6-8 years [ ] d) above 9 years [ ]
4)	Under which of these categories does your business fall?
	a) Electricals [ ] b) Hardware [ ] c) cosmetic [ ] d) Provision [ ] e) others [
SECT	ION B
5)	How would you rate your understanding of the VAT system
	a) V. Good [ ] b) Good [ ] c) Average [ ] d) Poor [ ]
6)	Have you ever operated under the Standard Rate i.e 15%?
	Yes [ ] No [ ]
7)	How do understand the VFRS?

THANK YOU

	Republic of Ghana  VAT & NHIL RETURE	<b>V</b>	(Regulation 29
	KNIIIC		PICATION NUMBER (TIN)
DUE DATE FOR SUBMISSION	OF RETURN	1	
1. IF THE RETURN FOR THE	E PERIOD IS NIL TICK HERE —		New York Confern as The
SUPPLIES OF GOODS AND/OR SERVICES: TAXABLE OUTPUTS DURING THIS PERIOD	VALUE OF TAXABLE SUPPLIES (OUTPUT) (EXCLUDING VAT & NHIL)  2	RATE OF VAT+NHIL	VAT + NHIL
VALUE OF ANY OTHER OUTPUTS DURING THIS PERIOD	4 5 6	-	ZERO RATE EXEMPT VAT + NHIL REMITTE
PURCHASES AND EXPENS LOCAL INPUTS IMPORTS DURING THIS PERIOD	ES: VALUE OF TAXABLE SUPPLIED (INPUTS) (EXCLUDING VAT & NHIL)  7  9  11. TOTAL INPUT (VAT + NHIL)	RATE OF VAT+NHIL	VAT + NHIL  8 10
13. EITHER-NET PAYMENT 14. OR NET CREDIT FOR T	AT + NHIL) FOR THE PERIOD  DUE FOR THE PERIOD Box 3 minus box 12		7
DECLARATION I HEREBY CERTIFY THAT T. GIVEN ON THIS FORM IS T	(FULL NAME OF SIGNATORY IN BLOCK LETTERS  HE INFORMATION I ATTACH C		
SIGNATURE:	NAME OF DAME	DATED	day month year
DESIGNATION / TITLE		AMOUNT	
Date of Receipt day mon	/ Amount Paid		) Payment type
Receipt No.	day mont	n year	lssned by
VETTED BY OFFICER	the state of the s	ntered by	