

UNIVERSITY OF GHANA
COLLEGE OF HUMANITIES

**ASSESSING FACTORS AFFECTING PROPERTY RATE COMPLIANCE
BEHAVIOUR IN GHANA: THE CASE OF GA EAST MUNICIPALITY**

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ABSTRACT

Property taxation is the backbone of local government revenue across the globe. Thus, property tax non-compliance behaviour threatens the independence, sustainability and development effort of local governments. This study sought to examine factors affecting property rate compliance behaviour in Ghana: the case of Ga East Municipality. Specifically, the study sought to assess property owners' level of knowledge of property rate laws, and the determinant factors of compliance behaviour. The study employed a mixed method. A total of 120 property owners were interviewed using a survey instrument and two key informant interviews were conducted with the Municipal Rating Office and the Municipal Deputy Finance Director. Logistic regression model was used to examine determinants of property rate compliance behaviour while descriptive statistics was used to assess knowledge of property rate law among property owners. Findings of the study indicate that majority of the property owners representing 53 per cent are not aware of property rate laws in Ghana. Logistics regression result also shows that female property owners are more likely to pay property rate than male property owners. Also, property owners perception of the complexity of the tax system was found to significant negatively correlated with rate compliance behaviour. However, knowledge of property rate laws and rate education was found to have no significant relationship with rate compliance. The study therefore recommends that property rate education focus on providing owners with education that helps them to understand the tax system, and the adoption of compliance process that eliminate human interaction and facilitate easy compliance with respect to time and cost.

DEDICATION

I dedicate this piece of work to my good friends, Emmanuel Kpogo and Rose Amuah whose financial support made it possible to undertake this course. A special gratitude also goes to my siblings, Agbeko, Beatrice and Patience and to my father, Gordor K. Gordor and my mother Christiana for their love and support throughout my educational career.

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LIST OF ABBREVIATIONS

AMA	Accra Metropolitan Assembly
AME	Average Marginal Effect
GDP	Growth Domestic Product
GEMA	Ga East Municipal Assembly
GSS	Ghana Statistical Service
KMA	Kumasi Metropolitan Assembly
OECD	Organization for Economic Co-operation and Development
VAT	Value Added Tax

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CHAPTER ONE

INTRODUCTION

1.0 Background

The aim of every government is to provide social services and infrastructural facilities to improve the life of its citizenry. Without doubt, tax revenue has been a major source of financial resources needed to scale up these aforementioned developmental agenda (Al-Mamun, Entebang, & Mansor, 2014). Perhaps, one can postulate that tax is nearly an inevitable source of government revenue all over the world. It is for this reason that the discussion on how to tax, who to tax, what to tax and issues of tax non-compliance is of great concern to every government.

Property tax is cited as one of the earliest form of tax (Bird & Slack, 2002). According to Carlson (2005), the earliest known tax records, dating from approximately 6,000 years B.C., are in the form of clay tablets found in the ancient city-state of Lagash in modern day Iraq, just northwest of the Tigris and Euphrates Rivers. Records also have it that, Property taxation was a thriving culture in Ancient Egypt around 5,000 B.C. where taxes were levied against the value of grain, cattle, oil, beer and land.

The Organization for Economic Co-operation and Development (OECD) defines property tax as a “recurrent and non-recurrent taxes on the use, ownership or transfer of property”¹. These include taxes on immovable property or net wealth, taxes on the change of ownership of property through inheritance or gift and taxes on financial and capital transactions.

¹ Definition of property tax retrieved from <https://data.oecd.org/tax/tax-on-property.htm> on 26/05/2017

According to Boamah (2013) property rate is the most dependable, sustainable and lucrative source of local government revenue across the globe. In many OECD countries like Australia, United States and Canada, property rate constitute more than 70 per cent of local government revenue annually. For instance, property rate constitutes 100 per cent of local tax revenue in Australia and Ireland, 99 per cent in the United Kingdom, 93 per cent in Canada and 72 per cent in the United States. It is estimated that property tax contributes more than 2 per cent of their GDP. Available data suggests that in 2015, property rate contributed 2.8 per cent, 4.1 and 3.5 per cent to the GDP of the United States, the United Kingdom and Belgium respectively (OECD, 2017).

In Africa and many of the developing countries, the story is however different. Property rate potential is still underexploited accounting for less than 0.54 per cent of GDP (Ahmad, Brosio, & Pöschl, 2014). Property rate proportion of local government revenue relative to OECD countries can best be describe as poor. For instance, Tahiru, Agbesi, & Osei-Owusu (2014) noted that between 2005 and 2010 property rate contributed approximately only 9.9 per cent annually to the total revenue of the Accra Metropolitan Assembly (AMA). Data from the Kumasi Metropolitan Assembly (KMA) and the Kasena Nankana District Assembly (KNDA) also indicates that in 2006, property rate accounted for only 5.6 per cent and 0.3 per cent respectively of their total revenue. Property rate also accounted for 18.7 per cent and 12.4 per cent of local revenue of the Wa Municipal Assembly (WMA) in 2004 and 2008 respectively (Boamah & Okrah, 2016). In the Ga East Municipality, it contributed only 11.8 per cent and 7.8 per cent in 2012 and 2013 respectively to the Internally Generated Fund (Ga East Municipal Assembly, 2014).

While a considerable number of properties escape the tax net due to outdated information on the property register (Tahiru et al, 2014), its administration is also flooded with non-compliance. Boamah (2013) and Ayitey (2013) recently reported that about 42.5 per cent and 15 per cent of property owners in Offinso and the Wa Municipality respectively have never paid property rate.

Owing to the growing interest to strengthen tax institutions in developing countries for effective tax mobilization with specific emphasis on property rate (Keen, 2012; Norregaard, 2013), a scientific analysis of factors affecting property tax compliance in Ghana has become very necessary. It is anticipated that scientific examination of socio-economic characteristics, tax knowledge and perception of non-compliance sanctions and their influence on tax compliance will better inform authorities to streamline policies to address the ailing property tax administration system.

1.1 Problem Statement

Property tax non-compliance is a prevailing problem in many developing countries (Castro & Scartascini, 2013; Engida & Baisa, 2014) and Ghana is not an exception (Boamah, 2013; Ayitey et al, 2013). Property tax non-compliance is an activity that threatens the independence, sustainability and development effort of local governments.

There is a considerable evidence suggesting that tax knowledge (Palil, 2010; Agbadi, 2011), enforcement and taxpayers' perception about the risk of detection and penalty shape tax compliance behaviour (Castro & Scartascini, 2013; Chauke & Sebola, 2016). Allingham and

Sandmo, (1972), added that, “Governments’ abilities to collect taxes depend on people’s willingness to comply with the laws and also their perception of the risk of detection and punishment for evasion and default”.

It does suggest that the tax administration system, laws and the level of enforcement are critical in enhancing tax knowledge and shaping taxpayer’s perception about risk of detection and penalty.

The legal instrument establishing property rate in Ghana, the Act of parliament (1993), Act 462 section 106(1) stipulates,

“Where the amount of the general or special rate due in respect of any premises is not paid within the period of forty-two days as provided in section 104, the District Assembly may apply to a Court for an order for the sale of the premises”.

Section 108 also states;

1. *“A person who, without lawful justification or excuse, the proof of which lies on that person, refuses or willfully neglects to pay a basic rate payable under this Act on or after the date on which it is payable, commits an offence and is liable on conviction to a fine not*

exceeding twenty-five penalty units or to a term of imprisonment not exceeding one month or to both the fine and the imprisonment”.

2. *“A person who makes a false statement with regard to that person's liability to pay rates, commits an offence and is liable on conviction to a fine not exceeding twenty-five*

penalty units or to a term of imprisonment not exceeding one month or to both the fine and the imprisonment”.

Theoretically speaking, these provisions are expected to promote tax compliance among property rate taxpayers in line with the standard and economic deterrence model (Alabede, 2012). However, the existing literature has paid very little attention to the lingering question of the extent to which the local assemblies promote the knowledge of, and enforce these provisions. Invariably, the degree of tax knowledge and enforcement has a positive correlation with compliance behaviour (Alabede, 2012).

Examining property taxpayer’s knowledge/awareness of property laws and their perception of the risk of detection and punishment for evasion in Ghana is the primary purpose of this study. The study also assessed the level of property tax education and enforcement of non-compliance sections. The study sought to achieve this using Ga- East Municipal Assembly as a study area.

1.2 Objectives of the Research

The main objective of this study is to critically examine factors that influence property rate compliance behaviour in the Ga –East Municipal Assembly. In achieving this broad objective, the study seeks to:

1. Examine the level of property rate law knowledge among property owners.
2. Examine the factors affecting property rate compliance behaviour.
3. Examine the challenges of property rate administration

1.3 Research questions

To achieve the above stated objectives, the following research questions are raised:

1. What is the level of knowledge of property rate law among property owners?
2. What are the factors affecting property rate compliance behaviour?
3. What are the challenges of property rate administration?

1.5 Significance of the study

Tax non-compliance is a global issue but the determinants of compliance behaviour differ across countries because of the differences in tax structure, commitment to government and perception of risk of detection. This study is therefore premised on the need to contribute to the broader discussion on factors affecting property rate compliance behaviour in Ghana.

Secondly, the outcome of the study will give the municipal authorities rich understanding of the knowledge, attitude and perception of risk of detection in the Ga- East Municipality regarding property rate. This will help inform the Municipal Finance directorate about ways to minimize the rate of non-compliance through reforms.

Furthermore, the recommendations made in this research can be adopted to improve the efficiency and effectiveness in financing local development in Ghana. Again, though various studies have been carried out on the property rate administration in Ghana, issues of compliance behaviour have seen little of these researches. Thus, this study will add to the body of knowledge on property rate administration in Ghana.

Finally, the study would provide a platform for further research by either the municipality, research institutions or individuals into the above stated area. This would also help test the validity of findings.

1.6 Organization of the study

The rest of the study is structured as follows: Chapter two contains review of related literature in the context of the research objective and also sheds some light on the tax administrative processes. Chapter three presents the research methodology and contextual profile of the Ga-East Municipality. It describes the research design, data requirements and sources, population and sampling techniques and data collection techniques employed in carrying out the study. The chapter also provides definition of the key concepts and construct of the theory that guides the study. The fourth chapter presents analysis of the data collected from the field, data presentation and discussion of the results relative to other studies. Finally, chapter five provides the major findings of the study. Based on the findings, appropriate recommendations are made to improve property rate administration. The chapter ends with a conclusion to the entire study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The objective of this chapter is to provide an overview of factors affecting tax compliance behaviour. This is to acknowledge what has been done in the past and to facilitate understanding of the analysis that will be presented in the subsequent chapters.

The chapter is structured into three sections. The first section deals with property tax administration, the second and third sections deal with property rate contribution to economic development and the determinants of tax compliance behaviour respectively.

2.1. Property Tax Administration

2.1.1 Defining property rate

The concept of property rate and property tax are often used interchangeably. The term ‘rate’ is mostly used in countries with British colonial heritage to refer to a property tax levied at the local government level (Norregaard, 2013). Most of the available literature has traced its inception prior to the 18th century (Adem & Kwateng, 2007; Ahmad et al, 2014). By way of definition, property rate is a financial burden imposed on immovable assets to be paid annually by the respective owner. The Economic Times defines it as an “annual amount paid by a land owner to the local government or the municipal corporation of his area. The property includes all tangible real estate property, houses, office building and the property that has been rented to others.²”

² Definition of Property Rate. Retrieved on 06/05/2017 from The Economic Times: <http://economictimes.indiatimes.com/definition/property-tax>

Bell (1999) has outlined four characteristics or principles of property tax administration. These are; legitimacy, openness, technical proficiency and fairness.

Legitimacy: refers to the recognition by the taxpayer that indeed he/she is obliged to pay the said amount as property tax subject to the laws of the land.

Openness: refers to transparency in the process of property valuation and the determination of the tax. For the taxpayer to accept the tax liability as legitimate, the processes leading to the derivation of the tax must be transparent and verifiable by all. Any doubt about the process affects the legitimacy thus the willingness of the taxpayer to honor his/her obligation.

Technical Proficiency: the process of valuation must be done in a professional manner devoid of political influence. This principle also demands that the valuation be done within appropriate administrative structures by trained staff with the necessary tools and information to effectively perform their function.

Fairness: this demand that, taxes are administered in a manner that treats all people equally. This principle requires that individual taxpayers have equal share in the cost and benefit associated with the tax. It also demands for transparency and objectivity in the process of distributing benefits, and in the application of sanctions for non-compliance.

2.1.2 Property rate administration process

In most countries, property rate administration is decentralized to local government and Ghana is not an exception. The local government Act (1993) of Ghana, Act 462 gives the local assemblies the mandate to levy tax on properties within their jurisdiction. In view of this, property rate determination and administration is at the discretion of local assemblies.

Scholars including Bird and Slack (2004) have suggested that property rate is considered appropriate and a reliable source of revenue for local government in most countries because properties are immovable. Thus, it is difficult to shift location in response to tax. Bell (1999) posited local government provides infrastructure facilities and social services such as drainages, neighbourhood roads, street lights and others services which benefit the community as a whole. However, the non-exclusive nature of these facilities and services make it difficult to monitor their direct usage and charge accordingly. Property tax therefore provides the avenue to generate revenue to expand and ensure sustainability of these facilities.

The process and the structure of property rate administration do not only have an impact on the revenue that will be realized, but also affect their equity and efficiency (Bird & Slack, 2002).

Bird and Slack (2002) have therefore outlined three key steps involved in the process of taxing real property. These are;

Properties Identification: the first step in property tax administration process involves the identification and description of the properties. It requires a complete inventory on all the properties within the jurisdiction of the assembly and assigns numbers to them.

Assessment and Appeals: the second stage involves the honest valuation of the property by professionals with requisite skills and tools, devoid of any political or preferential bias. The valuation authority differs across countries. In Ghana, the Local Government Act (1993) section 96 (8) states;

“Subject to this section, the Minister shall, in consultation with the Minister responsible for valuation, request the authority responsible for public lands valuation, or by a valuer appointed by that authority, to determine the rateable value of premises for the purposes of this section, and may for that purpose cause a valuation list to be prepared for each district.”

It is expected that the *rateable value* that will be arrived at will reflect the market value of the property in question. Ideally, the process of valuation should be done periodically (every 5 years as in the case of Ghana) to reflect the changes in the value of the property. The principle of fairness also requires that appropriate platform be provided for redress in cases where individuals disagree with the calculated value of their property.

Tax Collection and Arrears: it involves billing, collection and enforcement of property rate liability. In the words of Bell (1999), “this requires that tax liabilities be determined in an unambiguous fashion, that bills be deliverable to those responsible for paying the tax, and that there be a mechanism for collecting the amounts determined”. In Ghana, the tax is determined by multiplying the *rateable value* of the property by the *rate impost* (a ratio determine by the assembly based on the classification of the area). Individual rate payers are expected to honour their obligation within a specified time period (forty two days) after the assembly has delivered

their demand notices. Non-payment beyond this specified time period is considered non-compliance in which case, appropriate sanction is expected to be applied. The law suggests that the Assembly apply for court order for the sale of the property.

“Where the amount of the general or special rate due in respect of any premises is not paid within the period of forty-two days as provided in section 104, the District Assembly may apply to a Court for an order for the sale of the premises (Act 462 section 106 (1))”

2.2 Property Tax and Economic Development

Property rate has been reported as one surest source of revenue available to local government around the world (Prichard, 2010). Over the past decades, it has contributed significantly to the development and the growth of Gross Domestic Product (GDP) in many countries especially in the Western world. In 2002, it was one of the highest contributors to GDP of the United States accounting for \$300 billion (Brunori et al, 2006). It has also contributed significantly to the GDP of other developed economies like Germany, Canada and Belgium. In 2010, it accounted for about 3.6 per cent, 3.2 per cent and 3.0 per cent of the total GDP of Canada, United States and Belgium respectively (Enemark et al, 2016). The table below shows the contribution of property rate to GDP of selected countries from 2012 to 2015

Table 2. 1 Property rate contribution to GDP in OECD

Countries	2012 (%)	2013 (%)	2014 (%)	2015 (%)
Australia	2.4	2.6	2.8	
Belgium	3.3	3.5	3.6	3.5
Italy	2.7	2.7	2.9	2.8
USA	2.9	2.9	2.8	2.7
France	3.8	3.8	3.9	4
United Kingdom	3.9	4	4.1	4.1
Canada	3.7	3.7	3.7	5.8

Source: OECD (2017).

Notwithstanding, property rate contribution to GDP in developing countries especially in Sub-Saharan Africa has been poor, constituting less than 0.54% of GDP (Ahmad et al, 2014). In their study, Norregaard (2013) attributed poor property tax performance to a limited tax base in most African countries.

2.3 Determinants of Tax Compliance Behaviour

Palil et al. (2011) conceptualized tax compliance to be “taxpayers’ ability and willingness to comply with tax laws which are determined by ethics, legal environment and other situational factors at a particular time and place” (p. 12865). Thus, non-compliance is an activity which centers on the legal framework of the tax system (Sandmo, 2005). Tax compliance theories hypothesized that compliance could be achieved through both punitive and persuasive measures. Punitive measures take the form of measures to facilitate easy identification of non-complaints and making punitive actions severe enough to deter potential non-complaints. Persuasive measures on the other hand include activities geared towards promoting tax education and sensitization on benefits of compliance to motivate taxpayers (Chauke & Sebola, 2016). Scholars

such as McKerchar (2007) have also argued that tax systems and its complexity is critical in influencing compliance behaviour as much as socio-economic characteristics do.

Specific factors affecting compliance behaviour have been outlined in the literature to include age, gender, education, income, tax knowledge, perception of the tax system, attitude towards government. These are exemplified in Fisher's tax compliance model (Fisher et al, 1992). These factors can broadly be categorized into socio-economic, attitude and perception, and administrative factors.

2.3.1 Socio-Economic Factors

Age

Some researchers such as Widiyanto (2015) have argued that older taxpayers are less likely to comply with tax obligation than younger taxpayers. Notwithstanding, findings of other studies contradict this assertion. Using probit, logit and linear regression models to investigate the effects of demographic factors on income tax compliance in Indonesia, Widiyanto (2015) found that there was a significant negative correlation between age and income tax compliance behaviour. This suggest that, the older a person becomes, the lesser he/she comply with income tax obligation. Younger people were found to be 39 percentage points more likely to comply with tax obligation than their older counterparts. Al-Mamun et al (2014) also made a similar observation in their study, *Impact of Demographic Factors on Tax Compliance Attitude and Behaviour in Malaysia*. Their findings indicated that younger people were 15 percentage points more likely to comply with tax obligation than older people.

However, Agbadi (2011) investigating compliance behaviour of VAT flat rate scheme among traders in the Accra Metropolis found no significant correlation between age and tax compliance using a chi square test. Devos (2008) citing Richardso & Sawyer (2001) argued that when age is considered among other variables, its effect on taxpayers' compliance is diluted. This, in his view is one reason accounting for the contradictory findings on the interaction between age and tax compliance behaviour.

Gender

According Chau & Leung (2009) females are naturally less aggressive, more conforming and conservative in their attributes relative to males. These features tend to promote tax compliance behaviour among females relative to males. In line with this assertion, many studies have found that females are more likely to honour their tax than their males counterparts (Richardso & Sawyer, 2001; Al-Mamun et al, 2014).

In contrast, Widiyanto (2015) found no significant relation between income tax compliance and gender in Indonesia. Using both probit and logistic regression models to assess effects of demographic factors on income tax compliance, Widiyanto (2015) noted that male income taxpayers were 0.39 percentage points less compliant, however the p-value suggests the observation is not statistically significant. Devos (2008) also found no significant relationship between gender and compliance behaviour among income taxpayers in Australia.

Education

Education defined in this context refers to the respondent's formal educational attainment. Reports by Richardson (2006) cited in Chau & Leung (2009) indicate that general education level is significantly related to tax compliance. Chau & Leung (2009) argued that education facilitates peoples' understanding of the tax system and also has direct impact on their occupation and income. They also argued that people with high level of education are expected to have developed high moral standards which should promote tax compliance behaviour.

Notwithstanding, the effect of educational qualification on tax compliance is not clearly define in the tax literature (Devos, 2005). The complexity of the interaction between education and compliance is occasioned by how the education has been conceptualized in the tax literature. Some scholars have operationalized education to mean both formal education and tax education. As a result, it is difficult to analyze the relationship between formal education and compliance in isolation.

Level of income

People's purchasing power and ability to spend is generally correlated with their income level. Individuals can spend only within their budget limit and their choices are subject to utility maximization. The finding of Abdul (2001) confirms this assertion in the study "*Personal Income Tax Non-Compliance in Malaysia*". He found that taxpayers who faced personal financial constraints were more likely to evade tax compared to those in less or no financial distress. The study revealed that people with financial constraints tend to prioritize their needs and in most cases tax obligation was not on their scale of preference. Abdul (2001) observation

was validated by a recent study by Engida & Baisa (2014) in Ethiopia. In assessing factors influencing taxpayers' compliance in Mekelle City, Ethiopia, it emerged that taxpayers who are in critical financial constraints tend to be less compliant. These findings point to the conclusion that income level is crucial in influencing taxpayers' compliance behaviour. Therefore, unless explained by other variables, taxpayers with higher income level are more likely to comply with tax obligation than their counterparts.

2.3.2 Attitude and Perception

Tax Knowledge

Tax knowledge is defined as taxpayer's sensitivity and awareness of tax legislation and other tax-related information (Oladipupo & Obazee, 2016). Taxpayers' level of awareness and understanding of the tax laws have been proven to have a positive correlation with tax compliance (Palil, 2010). Tax educations promote taxpayers understanding of the tax systems, processes, laws and associated penalty for defaulting. This tends to increase people's propensity to comply with tax obligation, holding other things constant. Using stepwise multiple regressions model, Palil (2010) found that taxpayers with higher tax knowledge tend to be more sensitive to tax obligation than their counterpart with less tax knowledge. Agbadi (2011) made a similar observation among traders in Kumasi using a logistic regression model. These findings are consistent with Oladipupo & Obazee (2016) who also opined that tax education should properly be directed at the relevant targets so as to achieve the objective of improved tax performance.

Given the above evidence, one can conclude that proper education of taxpayers on the administrative process, procedures and tax laws improve their understanding and influences compliance behaviour.

Fairness of the tax system

One of the cardinal principles in designing a tax system is equity or fairness (Engida & Baisa, 2014). According to Wenzel (2003), there are three dimensions of fairness; distributive justice, procedural justice and retributive. Distributive justice demands proportional allocation of cost and benefit of tax, procedural justice and retributive justice also require transparency and objectivity in the process of distributing benefits, and in the application of sanctions for non-compliance, respectively.

Taxpayers often take into consideration the fairness of their tax with respect to these three dimensions. For instance, an individual taxpayer often makes comparison of their tax obligation with other individuals within his/her socio-economic group. Individual taxpayers are concerned about both the nominal amount and returns in proportion to others. The taxpayer wants to be treated fairly relative to their merits, efforts, and needs (Kirchler et al, 2008). It does suggest that, if an individual perceives his/her tax burden to be heavier than that of comparable individual, tax compliance is likely to be low (Kirchler et al, 2008).

These comparisons are sometimes made between different communities or groups with respect to their tax obligation vis-a-vis expected returns. On the community level, taxpayers are concerned about the fairness of outcomes of their community and want a fair treatment of their community relative to other communities or groups. On the one hand, if a specific community of people perceives its tax burden as heavier than that of another group or the outcome (benefit) of their tax lower than the comparing community, compliance is likely to be low. On the other hand, when the community perceive their tax burden as fair in comparison with other community and

distribution of appropriate resource as equitable, tax compliance is likely to be high. In consonance with this assertion, the work of Geberegbe et al (2015) on *Perception of Tax Fairness and Personal Income Tax Compliance* found that income taxpayers perception tax fairness has a significant influence on compliance behaviour

In contrast, a study by Saad (2010) in Malaysia found no association between perception of fairness and income tax compliance. He argued that, in a much legalized environment where non-compliance sanctions are strictly enforced, taxpayers comply with obligation irrespective of their perception of fairness. In other words, despite their resentment with the tax system, they still need to pay tax which is compulsory

Perception of government

Fiscal psychology models stipulate that people's attitudes and beliefs are a good predictor of actual behaviour (Schmölders, 1959). Thus, taxpayers' perception of government in terms of the benefits they receive for paying taxes boost their compliance behaviour (Damayanti, et al 2015). Taxpayers expect maximum and efficient utilization of their taxes by public officials in providing services. When government provides services that meet the taxpayers' expectation, they might tend to comply with tax laws. On the other hand, if they perceive government to be corrupt and inefficient in the utilization of their taxes, compliance is likely to be low.

Notwithstanding, Engida & Baisa (2014) using cross sectional survey design to assess factors influencing tax compliance in Ethiopia found no relationship between compliance behaviour and people's perception about government. This finding is however limited and inconclusive because

such observation could be occasioned by other factors such as enforcement effort which the researcher failed to report on.

2.3.3 Administrative Factors

Detection and penalty

Taxpayer's predisposition to evade taxes without notice and the penalty for non-compliance or evasion affect their compliance behaviour. This proposition is evident in economic deterrence theory which hypothesizes that people are economically rational and their action and inaction are motivated by their evaluation of the associated costs and benefits (Chauke & Sebola, 2016). According to Devos (2014) taxpayers are "perfectly moral, risk-neutral or risk-averse individuals who seek to maximize their utility, and chose to evade tax whenever the expected gain exceeded the cost. Thus, a pure 'cost-benefit' approach is given for why or why not taxpayers may comply with the tax laws" (p. 15).

In consonance with this assertion, Ali et al (2014) using a binary logit regression model found that a unit increase in taxpayers' perception of being detected for tax evasion increases the tendency for tax compliance by 5 per cent and 8 per cent in Kenya and South Africa, respectively.

Kirchler et al (2008) postulated that punitive mechanisms may encourage tax compliance but it is not an incentive for a sustainable tax compliance behaviour. For instance, Castro & Scartascini (2013) showed that deterrence message to potential tax evaders have positive correlation with tax compliance only in the short run. Leviner (2008) argued "enforcement efforts that rely exclusively on punitive measures and the severity and probability of punishment are likely to be

short-sighted at best and counterproductive at worst”, (p.365). In summary, risk of default detection and penalty is necessary but not a good predictor of tax compliance behaviour in the long run.

Complexity of the Tax system

The complexity of tax system is the degree to which its administration allows for better understanding of the process and promote easy compliance with respect to time and cost. Complexity may increase both the taxpayer’s cost of complying with the obligation and the transaction cost of enforcing tax liability. According to McKerchar (2007) complexity in tax administration may take the form of increased opportunity cost of time required to comply and the direct cost involve to pay the tax such transportation cost. This situation tends to promote non-compliance among taxpayers taking into consideration the cost involve to comply. Compliance behaviour is worsen when associated penalty for non-compliance is perceive to be low or non-existence

Complexity and ambiguity in the tax administration can also create uncertainty that may reduce taxpayer perceptions of fairness in the tax system and can lead individual taxpayers to believe that they bear a disproportionate tax burden. In conclusion, complexity of tax system is very critical in the effort to boost tax compliance behaviour. It is expected that when tax compliance behaviour will be negatively correlated with tax compliance.

2.5 Gap in the literature.

The economic deterrence theory, fisher's tax compliance model and fiscal psychological model have been employed among others in the literature to provide some explanation to taxpayer's compliance behaviour. Notwithstanding, no single theory has adequately provided explanation and precisely predicted tax compliance behaviour. The interactions between tax compliance and some variables such as gender, perception of detection and punishment, and education has been inconsistent or remain complex. For instance, Ali et al. (2014), in consonance with economic deterrence theory, suggest that risks of detection and punishment tend to promote tax compliance. However, Leviner (2008) have argued that punitive measures are ineffective in enforcing tax compliance. The review also showed that, most of the studies on taxation have been focused on income and personal tax. Not much attention has been paid to property taxation, especially in Ghana.

2.6 Conclusion

The literature findings indicate tax compliance behaviour is a function of socio-economic characteristics, attitude and perceptions, and tax administration system. Factors outlined in the literature includes age, gender, income, education, tax knowledge, complexity of the tax system and risk of detection and penalty. The review also highlighted the significant contribution property taxation has made to GDP in many Western and OECD countries. While there is a limited data on property rate contribution to GDP in Africa, the available data showed poor performance. Limited tax base, inadequate data on properties have been cited among other reason for the poor performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter is divided into three main sections; methodology, background profile, and the theoretical framework of the study. The first section covers the study area. It also covers the demographic characteristics and revenue mobilization structure of Ga East Municipal Assembly. The second section presents the theoretical framework that underpins the study. Section three of this chapter outlines the methodology of the study. The section provides systematic procedures adopted for achieving the objectives of the study.

3.1 Description of the Study Area

3.1.1 Political and Administrative

The Ga East Municipal Assembly was established in 2004 by an Act of Parliament (Legislative Instrument 1589) as a district and was elevated to municipal status in 2012. It is located at the north-eastern part of Accra and is bordered on the west by the Ga West Municipal Assembly (GWMA), on the east by the La - Nkwantanang Madina Municipal Assembly (LaNMMA), the south by Accra Metropolitan Assembly (AMA) and the north by the Akwapim South District Assembly. It is the highest political authority in the municipality vested with the powers to deliberate, legislate, plan and develop the entire municipality through the preparation and effective implementation of development plans and budgets (Ga East Municipal Assembly, 2014).

Administratively, the Assembly is headed by the Municipal Chief Executive who is appointed by the president and approved by 2/3 majority of the General Assembly members present. The General Assembly consists of ten (10) elected members, each representing one electoral area and 4 appointed members. The 10 electoral areas are Taifa South, Taifa North, Abokobi, Agbogba, Kwabenya, Haatso, Atomic, Dome East, Dome west and Abladjei. The Member of Parliament for Dome-Kwabenya constituency and the Municipal Chief Executive add up to make 16 members. The General Assembly is headed by an elected Presiding Member with the Municipal Coordinating Director as the Secretary (GSS, 2014).

3.1.2 Demographic Characteristics

According to the 2010 National Population and Housing Census, the population of the Municipality is estimated at 147,742 with a growth rate of about 4.2 per cent. The population consists of about 49 per cent males and 51 per cent females with about 82 per cent of the population residing in urban communities (GSS, 2014).

The total number of households is estimated at 37,415, 82 per cent of them in the urban area and the remaining in the rural area. The average household size is estimated at 3.9 and 4.0 in the urban and rural areas respectively. About 70 per cent of the Municipal's population falls within the economically active age group (15-65) out of which 92 per cent of them are employed (GSS, 2010).

3.1.3 Revenue Mobilization

For revenue mobilization, the Municipal Assembly has been divided into nine (9) divisions to enhance collection, supervision and monitoring. The Assembly engages the services of revenue contractors to collect property rate on its behalf. Aside this arrangement with the private revenue collectors, the Assembly has also identified easy collectable areas and has assigned its staff to these areas. For effective coordination of revenue activities, the assembly organizes regular meetings with revenue collectors, contractors and supervisors. Public education programmes are regularly organized in the communities as well as in the markets to promote tax knowledge among taxpayers (Ga East Municipal Assembly, 2014).

The current property rate administration system is, however, engulfed with challenges such as inadequate data on properties for property rate billing and delays in banking revenue collected by revenue contractors.

As a long term strategy to increase Internally Generated Funds (IGF), the Assembly in collaboration with a private consultant is undertaking a programme to develop and implement a revenue generation system. The exercise involves identifying, numbering and naming of streets, households' socio-economic status, commercial and residential properties in a computerized system to improve planning and revenue generation³.

3.1.4 Background of study communities

This study focused on two communities in the municipality: Agbogba and Haatso.

³ Information gathered during an interaction with Municipal Rating Officer

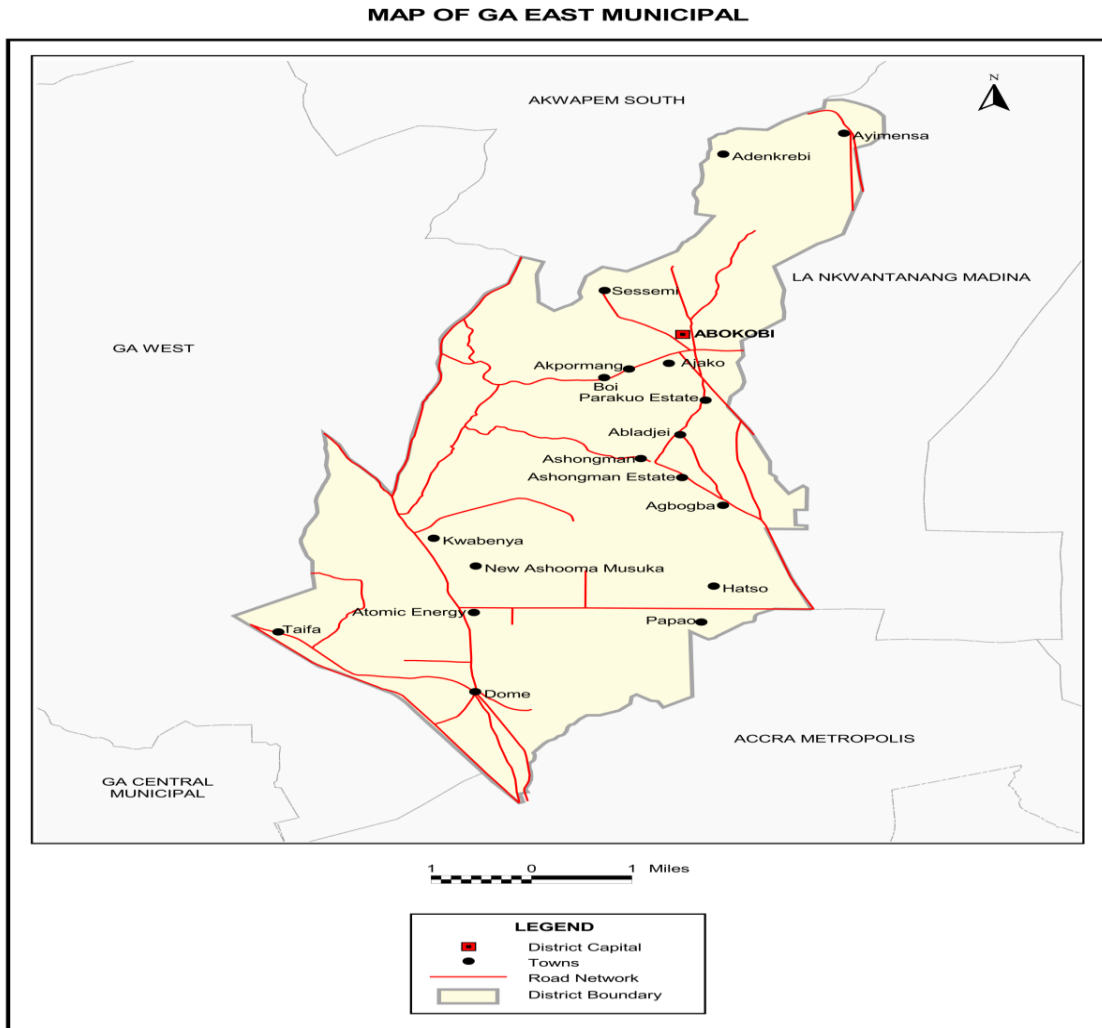
Agbogba: This community lies within the Agboba electoral area which is geographically located at the south-eastern part of the Ga East municipality. It is traditionally a Ga community but currently dominated by migrants with Muslims being a significant proportion. It is classified as a second class residential area according to the Municipal Assembly's residential classification of communities. Housing type in the community is largely semi-detached self-compound and compound houses. The Akatsi Abor segment of the community is largely dominated by single story housing unit.

The community has only one police post and also lacks drainage, neighbourhood roads, market structure and has no government health facility. The poor layout and defective solid waste disposal in some segment of the community exposes them area to severe flash flood during heavy rainfall.

Haatso: This community lies within the Haatso electoral area which is also geographically located at the south-eastern part of the Ga East Municipality. It is predominantly a middle class community and has been categorized as a first class residential area according to the Municipal Assembly's classification of residential area. It is considered the second most commercial community within the municipality harbouring some telecommunication and financial institutions like Ecobank, Fidelity Bank, Standard Chartered Bank and MTN.

The main housing unit in the community is single story and semi-detached self-compound houses. The community is relatively planned with roads yet many untarred, drainages and pipe water system and two police posts.

Figure 3.1 Map of Ga East Municipality



Source: Ga East Municipal Assembly

3.2 Theoretical Framework

The underlying theoretical model of this research is Fischer's tax compliance model which has been used in many studies to explain taxpayer's compliance behaviour. The model suggests

that tax compliance behaviour can be explained by economic, social and psychological variables such as age, level of education, income levels, complexity of the tax system, penalty and people's attitude and perception. Citing Fisher et al (1992), Chau & Leung (2009) categorizes these factors into four; Demographic, Noncompliance Opportunity, Tax System/Structure and Attitudes and Perceptions.

Fisher's model is more preferable in tax literature because so far it is the only model which worked extra hard in augmenting both the Economic, Social and Psychological factors as well gives a clear conceptual framework that highlights the concept of tax compliance behaviour. Notwithstanding, the model has been criticized for not taking into consideration other factors such as Emotional Intelligence (EI), moderating effect of tax administration reform and the moderating effect of perceived tax service quality and their effect on the taxpayer's compliance decision.

The model was adopted and modified to reflect and help analyze the linkages between factors influencing property tax compliance behaviour. It was chosen because of its ability to offer explain how tax compliance is influenced by social-economic, attitude, perceptions and administrative factors. Applied to this work, the model will help to examine perception of risks detection and penalty, property tax knowledge and enforcement effort and their influence on compliance behaviour. It will also help explain the relationship between tax compliance behaviour and socio-economic characteristics of property owners

3.2.1 Theoretical Constructs

Socio-Economic Characteristics: the socio-economic variables consist of age, gender, educational and income level of the property owner. It is assumed that, socio-economic characteristics will have an impact on compliance behaviour. For instance, it is expected that highly educated people will have higher paying jobs and higher income levels which in turn will have some effect on their compliance. Also, one's level of education will facilitate his/her understanding of the tax laws which has implications for compliance.

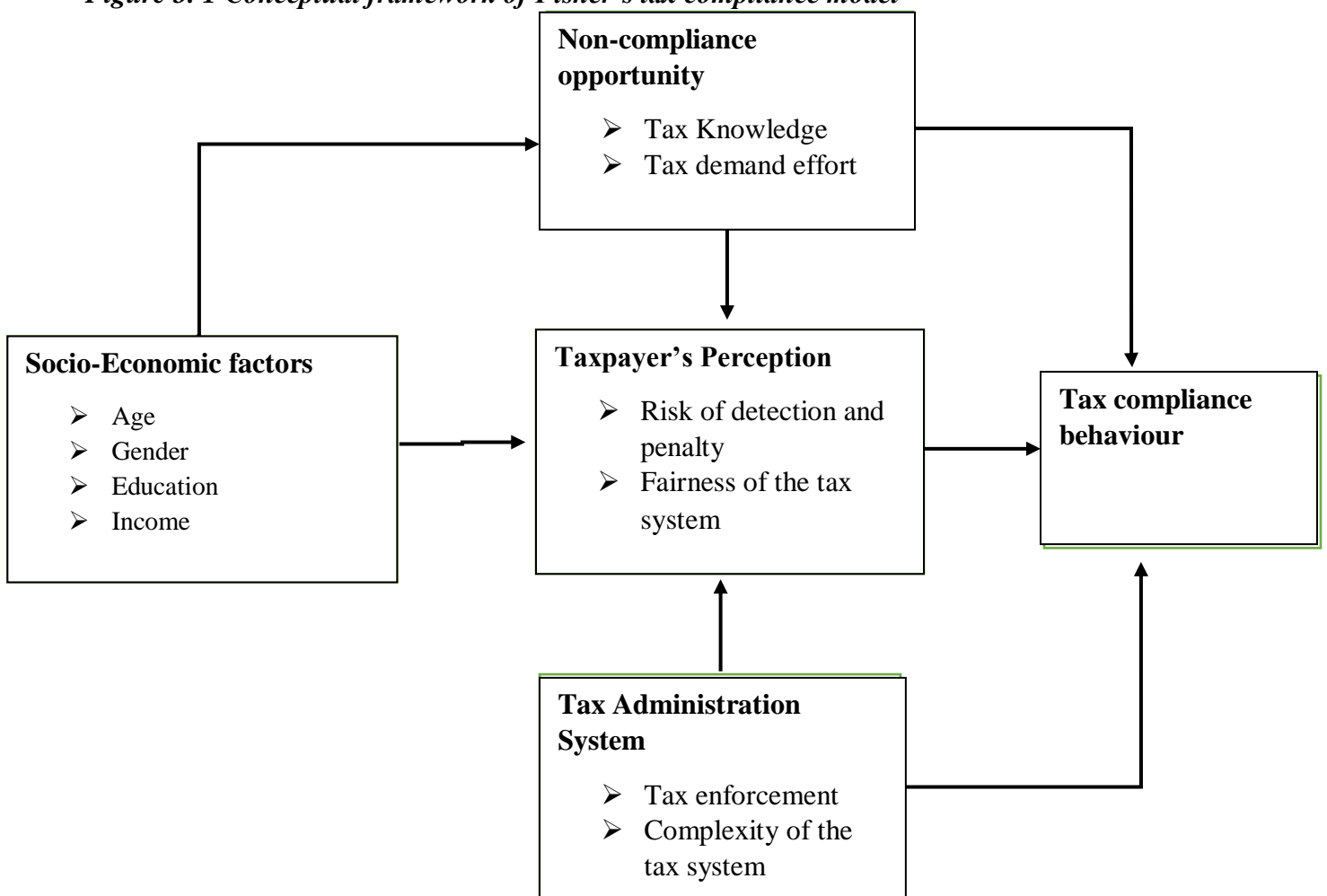
Non-Compliance opportunity: non-compliance opportunity is the probability to default on tax without detection as a result of one's income level, source of income, knowledge or occupation. The variables for non-compliance opportunity considered in this study are individuals' sensitivity to property tax laws (tax knowledge) and demand effort. It is expected that, level of knowledge of the tax laws which is invariably affected by the socio-economic variables will influence their compliance behaviour. Also, people who do not receive their property rate demand notice are presented with a higher non-compliance opportunity which will affect their perception of detection and compliance behaviour.

Attitude and Perception: the model suggests that, people's perception about the fairness of the tax system and perception of risk of detection and penalty have a direct impact on their compliance behaviour. People compare their economic benefit for non-compliance and the penalty they are likely to suffer when caught for evasion. If they perceive the economic benefit of defaulting lower than the economic loss they may suffer when caught, it is likely they will comply.

Tax Structure/System: the complexity of the tax system, probability of detection and tax rate influence people’s perception and attitude towards tax compliance behaviour. The complexity of the system refers to the degree to which tax administration allows for understanding of the process and easy compliance. The theory postulate that, the structure will affect people’s perception of the fairness or otherwise of the tax and their perception about the risks of detection and penalties.

Compliance Behaviour: Tax compliance refers to making tax payments and submitting to tax laws within the specified time and in the required formats.

Figure 3. 1 Conceptual framework of Fisher’s tax compliance model



Source: Adopted from Fisher *et al.*, (1992)

3.3 Research Design

Research methodology is basically the underlying philosophy that underpins a research. It offers the scientific basis and the logic for the process adopted to collect, analyze and interpret data to answer the research question. There are three basic research methodologies in social science research. These are quantitative, qualitative and mixed method. This study employed a mixed method approach to analyse factors affecting tax compliance behaviour and assessed challenges in the administration of property rate in the study area. Mixed method was used because it was the best method to help address the subject matter of this study. Many scholars including Johnson & Onwuegbuzie (2004) have argued in favour of mixed method asserting that, adding qualitative interviews to quantitative analysis serve as a way to discuss directly the issues under investigation and tap into participants' perspective.

In this study, quantitative method was useful in analysing factors of property rate compliance behaviour whereas key informant interviews with property rate administrators were also considered necessary to understand the challenges of property rate administration. This was done because there is a nexus between the property rate administration and property rate compliance.

3.3.1 Population

Research population can be defined as a complete set of elements (persons or objects) that possess some common characteristic from which samples can be drawn for a study (Bhattacharjee, 2012). The population of this study consists of property owners in Haatso and Agbogba communities of the Ga East Municipal Assembly. These two electoral areas were purposefully chosen out of the ten electoral in the municipality. Aside the distance, financial

constraints and accessibility, these two communities were chosen because they possess distinct characteristics that fairly represent the municipality as a whole. Based on the municipal assembly's classification of communities based certain criteria which includes availbilty of some social amenities like raods, water supply and so forth, Haatso is classified as first class residential community while Agbogba is a second class.

3.3.2 Sample size

Because property rate compliance behaviour is a binomial variable the researcher adopted population proportion function to determine the sample size. $n = Z^2 \left(\frac{P(1-P)}{ME^2} \right)$, where

n is the sample size,

Z^2 is the Z-score for the distribution

P is proportion of people ever paid property rate

ME the margin of error allowed by the researcher.

In determining the sample size, the researcher chose 95% confidence level and allowed 10% margin of error. Based on an earlier study (Boamah, 2013), the proportion of people who have ever complied with property rate obligation was assumed to be 75%. At 95% confidence level for a normal distribution, 1.96 represents two standard errors above and below the population mean.

Therefore, $n = 1.96^2 \left(\frac{0.75(1-0.75)}{0.1^2} \right)$, $n = 72.03$. This means that, the optimal sample size for the study is 72. The researcher increased his sample size to 120 to cover respondents who may not be willing to participate.

3.3.3 Sampling Technique

Sampling is the “process or technique of selecting a suitable sample for the purpose of determining parameters or characteristics of the whole population” (Adams et al, 2007, p. 87).

The study of an entire population is often not preferred in social science research because of time and financial constraints. Hence, a sample technique is mostly adopted to select a sub set of the population for the purpose of research (Bhattacharjee, 2012; Adams et al, 2007). According to Anaman (2014) the sample must be representative of, and share common characteristics with the population from which it was drawn. Notwithstanding, the sample does not need to be similar with the population in all aspect but only in those that are subject of the study.

In selecting the sample for this study, a multistage sampling technique was adopted because of the large size of the population. Multistage sampling is a sampling technique that involve two or more stages in the selection of a sample. In first stage of the sampling in this study, the two communities were divided into 4 clusters each, using street names and suburbs. This was done to ensure that property owners in every segment of the communities were included in the sample. Also, according to GEMA (2014), the number of properties is estimated at 1000 for both Haatso and Agbogba. To get a fair representation, all the eight clusters were equal in proportion and therefore assigned equal sampling weight. The optimal sample size derived from the single proportion formula above was 120, and the estimated total number of properties was 1000. Therefore, each cluster received $120/8=15$. In each cluster, the study interviewed 15 property owners, this is because the total number of properties in each cluster was not known, and so using proportional sampling to size in each cluster was not possible. Listings of all properties in each cluster should have been conducted, but the time limit within which this study needed to be produced did not allow for this to be done. Although unusual, the study therefore had to assume

uniformity to limit potential bias of applying proportional sampling when the actual size of each cluster had not been determined. The sampling technique adopted within each cluster was the systematic sampling technique ($125/15=8.33$). What it means is that, the kth term was pegged at 8. But with systematic sampling, the first point must be chosen at random, and in the present study the simple random approach was used to determine the first start. By that exercise, the first start fell on the first residential property from the eastern end of each community, after the first house every 8th house was visited with the questionnaires. This process was continued till the 15 residential properties were obtained. By the study design, there were four rounds of visits in each house. The first was the distribution visit, and 3 repeated visits for collection of completed questionnaires.

Table 3. 1 Names of clusters and the number of respondents

Community A: Haatso		Community B: Agbogba	
Name of cluster	No of respondents	Name of cluster	No of respondents
Ecomog	15	Cosway	15
Mabey	15	Agbogba Top base	15
Papao	15	E P	15
Haatso rabbit	15	Akatsi Abor	15

Source: Author's own construction

3.3.4 Source of data

Primary data constitutes the major source of data used in this study. The primary data was collected through a survey instrument administered to property owners. It also includes key informant interviews conducted with the Municipal Rating officer and the Deputy Finance Director of the Ga East Municipal Assembly.

3.3.5 Survey design

Quantitative

In line with the conceptual framework and research objectives, the survey instrument used was structured into 5 sections namely; socio-economic characteristics, property rate knowledge, property rate administration, perception of risk of detection and penalty, and property rate compliance behaviour, as shown in appendix I. Question type for section A (Socio-Economic Characteristic) and E (property tax compliance behaviour) were closed ended. Section B, C and D consisted a 5 level Likert scale questioning which sought to assess respondent's level of agreement or disagreement to a list of claims relating to their knowledge of property rate laws, administrative procedures and perception of risk of detection and penalty, respectively.

Qualitative data

Interview guide was used for the key informant interview. The guide was designed to help solicit information relating to property rate administration in the municipality (see appendix II).

3.3.6 Data collection technique

Quantitative

The questionnaires were mainly self-administered except for the few instances where they were administered face to face because the respondents could hardly read. For self-administered surveys, the researcher personally dropped the questionnaires in the selected houses and facilities to be answered by the respective property owner or a care taker in cases where the property owner does not stay in the country. A follow up visits were made to the various locations to

retrieve the questionnaires. It took an average of four (4) follow up visits to retrieve a questionnaire. The data collection process took place between the months of May and June 2017 and lasted for 31 days.

Qualitative

An introductory letter was first sent to the Municipal Coordinating Director to inform and seek his approval of the officers to grant the interviews (see appendix II). Date and time for the interview was scheduled with the participating officers. Before the interviews were conducted, respondents willingly gave their consent and the interviews were conducted face to face by the researcher himself.

3.3.7 Data Management and Analysis.

All questionnaires collected were edited and checked for completeness and correction of errors. SPSS was used for the quantitative data entry and exported to Stata Version 13 for the analysis. Qualitative interviews were transcribed into meaningful text and the relevant findings from the interviews were used simultaneous with the quantitative data in the analysis to give in-depth understanding of the quantitative findings.

Analysis of the data is reported using a combination of varied approaches and techniques such frequency tables, pie and bar charts. Quantitative and Qualitative analyses were reported with reference to the study's objectives placing it in the context of the conceptual framework. Pearson's Chi Square test of significant was used to established association between some key

variables in this study. Logistic regression model was also used to ascertain how compliance behaviour can be predicted base on some independent variables such tax knowledge.

Objective 1: Examine the level of property tax law knowledge among property owners.

As stated in the previous chapter, tax knowledge refers to taxpayer's sensitivity and awareness of tax legislation and other tax-related information. To achieve the stated objective, three Likert scale type questions were used. 1) I have ever received some form of property rate education from the assembly 2) I am aware of the property rate laws in Ghana, 3) I am aware of the penalties associated with non-compliance behaviour. In each of the questions, respondents were asked to indicate their level of agreement to these assertions. Descriptive statistics, specifically frequency distribution table was used to describe the level of property tax knowledge among property owners in the study area.

Objective 2: Examine factors affecting property tax compliance behaviour

Logistic regression model was used to assess factors affecting property tax compliance behaviour. The dependent variable in this study has a binary response which takes the form of 1 for paid property rate and 0 for did not paid, and in this case the choice of a binary response model is preferred.

In determining the probability of paying property rate, the model is represented as follows:

$$\text{Log} [P / (1-P)] = \beta_0 + \beta_1 x_1 + e$$

Where p= 1 if the respondent paid property rate and zero (0) otherwise,

β_0 = represent the intercept parameter

β_1 = the coefficient of the parameter estimate

X_1 = is the predictor variable

e = stochastic disturbance term

The model is specified as follows

$$\text{Tax Compliance} = \beta_0 + \beta_1 \text{gender} + \beta_2 \text{age} + \beta_3 \text{income} + \beta_4 \text{education} + \beta_5 \text{knowledge} + \beta_6 \text{risk} + \beta_7 \text{complexity} + \beta_8 \text{fairness} + \beta_9 \text{residential class} + \beta_{10} \text{tax education} + \beta_{11} \text{tax utilization} + e$$

Objective three: examining challenges of property rate administration.

To achieve this objective, key informant interviews were conducted with officers of the Ga East Municipal Assembly. Interviews were transcribed into meaningful text and the information was used to provide in-depth understanding of the quantitative analysis.

3.4 Limitations of the Study

The timeline for completion of the study was short and was also constrained financially. The Municipal Assembly lacked an updated and comprehensive register of all properties in the two communities. It was therefore difficult to obtain a sample frame for this study. Respondents were reluctant to participate in the study due to the sensitive nature of the topic. They had to be constantly reassured that the purpose of the study was purely academic.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION OF RESULTS

4.0 Introduction

This chapter presents data analysis and discusses the results of the study. The analysis involves description of the data with respect to gender, age, education, income, property right and property rate compliance behaviour. The chapter also contains analysis of property rate administration issues such as property rate education, knowledge of property rate laws among property owners, property rate compliance behaviour and the major reason for non-compliance. Logistic regression is used in this chapter to assess factors affecting property rate compliance behaviour.

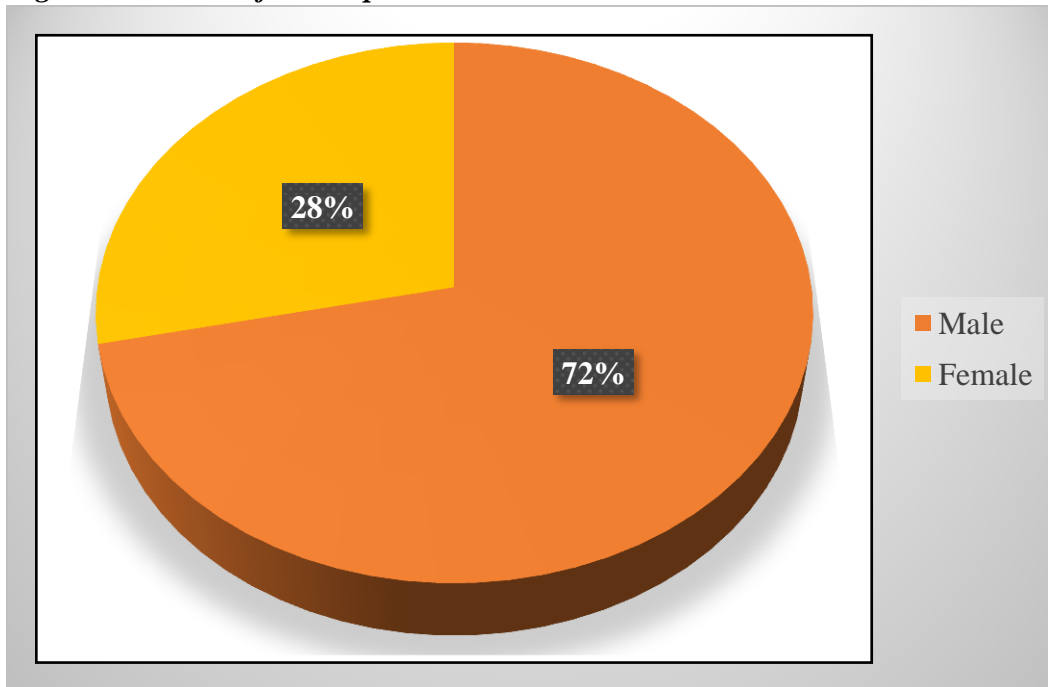
4.1 Socio-economic characteristics

Four socio-economic characteristics were of priority to this study. These are gender, age, education and average monthly income of the respondent.

Figure 4.1.1 shows that most of the respondents interviewed were male constituting 72 per cent of the sample with females accounting for only 28 per cent. This result suggests that there are more male property owners as compared to female property owners. This is expected because by Ghanaian tradition, males are mostly considered as the head of the family so even if the property was jointly built by husband and wife, the man is likely to be considered as owner of the property. Many studies (Al-Mamum et al, 2014; Richardson & Sawyer, 2001) have concluded that female taxpayers are more compliant relative to male counterparts. By implication, property

rate administration is likely to suffer some non-compliance behaviour because it's largely dominated by males who have been found to be less compliant.

Figure 4.1.1: Sex of the respondents



Source: Field data, 2017

Table 4.1.1 shows the age distribution of the respondents. The minimum age of the respondents is 30 years with the mean age of 55 years. The maximum age of property owners recorded is 82 years. Even though the mean age of property owners is very high, it is not likely to have any influence on compliance behaviour contrary to the assertion made by Widiyanto (2015). This is because the effect of age on tax compliance behaviour is minimal especially when considered among other variable (Devo, 2008).

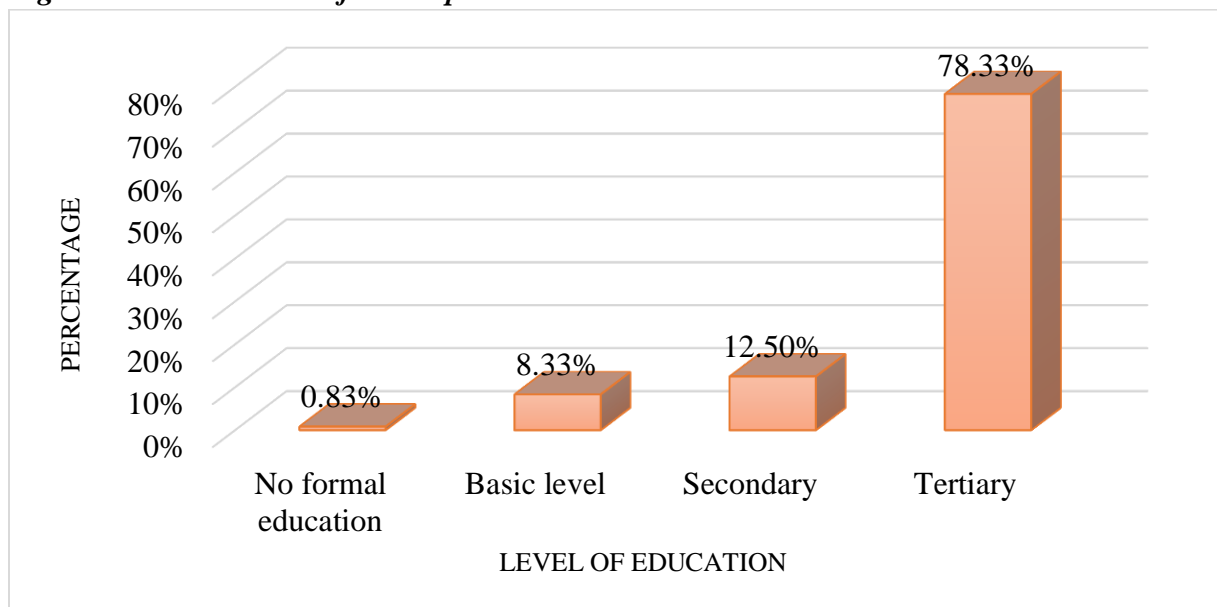
Table 4. 1.1 Age of the respondents

Statistic	Value
Minimum	30
Mean	55
Maximum	82
Std. Dev.	14

Source: Field data, 2017

Formal education promotes taxpayers sensitivity to tax laws and significantly influence compliance (Chau & Leung (2009). Chau & Leung (2009) further argued that people with high formal education are expected to develop high moral standard, a characteristic which favours tax compliance. From figure 4.1.2, most of the respondents were literate with majority of them having some formal education. A total of 94 (78.33 per cent) had attained tertiary education while 12.5 per cent have had secondary education. This means that people with tertiary education own more property in the study area than those with no formal education. With higher proportion of property owners having attained tertiary education suggests that tax knowledge is likely to be high. By Chau & Leung (2009) argument, property rate compliance is expected to be high.

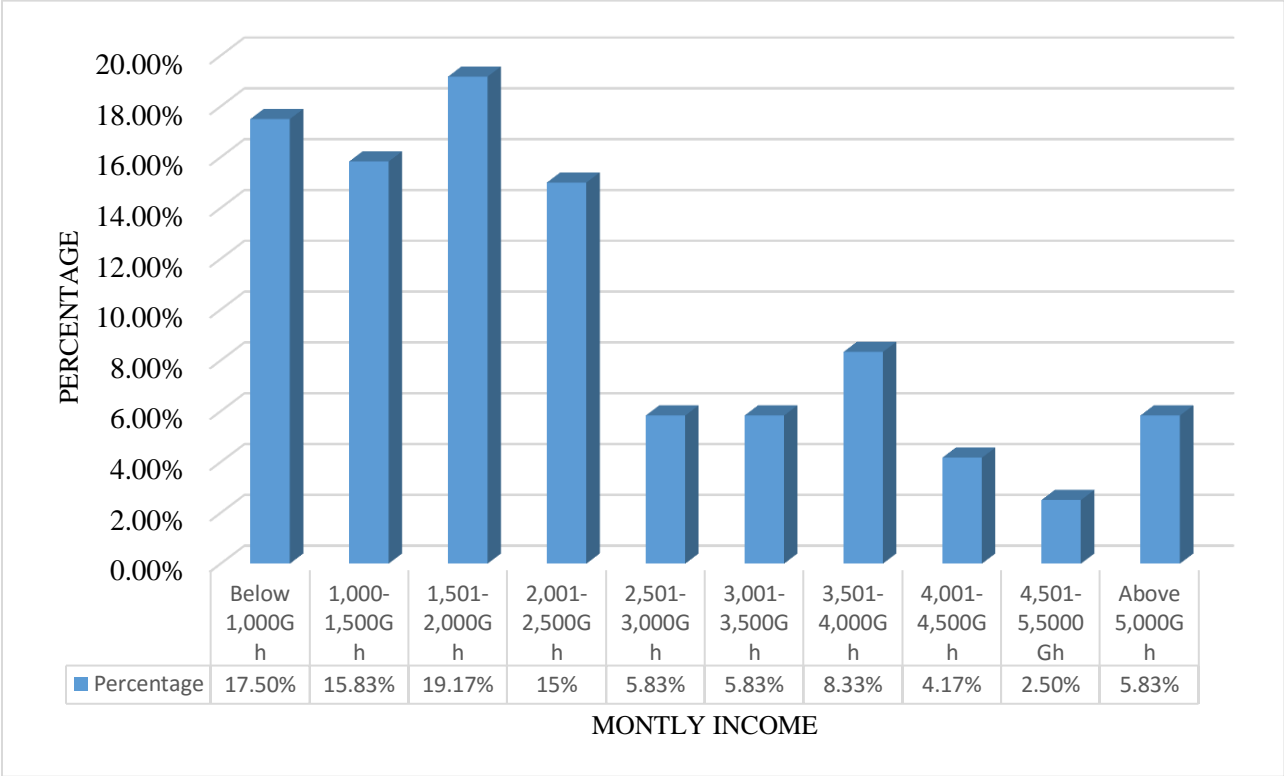
Figure 4.1.1 Education of the respondents



Source; Field data, 2017

From figure 4.1.3, more than half of the respondents (64.75%) earn 2,500 Ghana cedis and below. Only 5.83 per cent of the respondents earn above 5,000 Ghana cedis. The average monthly income of the respondents is relatively low compare to expected corresponding income of their educational qualification. This is because significant proportion (21.3 per cent) of the respondents interviewed were on retirement therefore do not receive any monthly salary.

Figure 4.1.2 Reported monthly income of the respondents



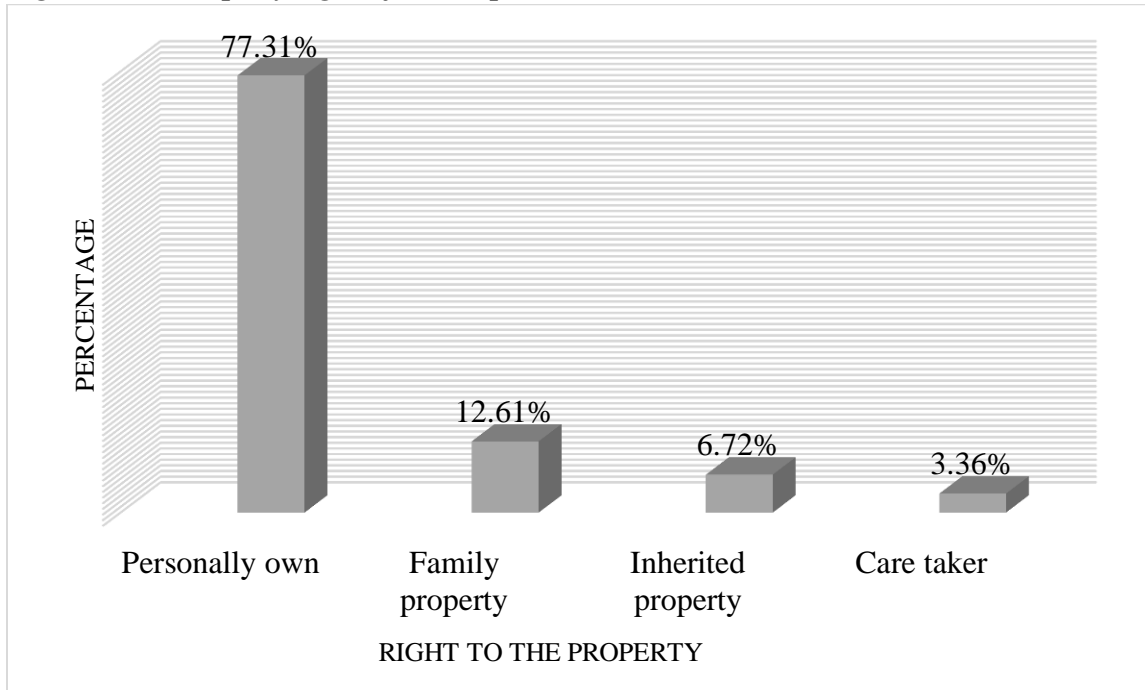
Field data, 2017

4.1.2 Property ownership

From figure 4.1.4, significant majority of the respondents representing 77.31 per cent of the sample personally owned the property while 12.6 per cent were caretakers of their family

properties. Also, 6.7 per cent of the respondents indicated they inherited the property and 3.36 per cent were care takers of private properties owners.

Figure 4.1.3 Property right of the respondents



Field data, 2017

4.2 Property rate law knowledge among property owners

Table 4.2.1 shows respondents’ knowledge of property rate laws and penalties associated with non-compliance behaviour. With regards to property rate education, the study found that, most property owners (83 per cent) have never received any form of property rate education from the municipal assembly. This result suggests that property rate education is very low in the study area. This situation is however worse in the second class residential area where only 8 per cent of property owners have ever received some form of property rate education compared to 25 per cent in the first class area. It emerged from the key informant interviews that, the channel for carrying out property rate education is ineffective leaving many property owners uninformed of

property rate laws and related matters. The assembly rely largely on resident association meetings, town hall meetings and the use of information van to disseminate property rate information. However, a key informant asserted that these channels have not been effective because the target audience of property rate education do not attend these meetings. With respect to the information van, he recounted

“... as for the information van it’s a challenge because as I speak to you now, it has a problem and I don’t even remember the last time we used it” (Respondent 1).

With respect to knowledge of property rate laws, it emerged that only 47 per cent of property owners are aware of property rate laws in Ghana as stated in the Local Government Act (1993), Act 462 section 106, 107 and 108. Similar proportion (42 per cent) of property owners were also found to have knowledge of penalties associated with non-compliance behaviour while 58 per cent of property owners were not aware of penalties for non-compliance. In comparison with property rate education, it does suggest that some property owners acquired the knowledge of property rate laws through formal education (respondents in the sample with formal education are about 99%).

In terms of the disparity between the two communities, 51 per cent of the respondents in the first class area indicated they are aware of property rate laws compared to 43 per cent of the respondents in the second class area. Further, 47 per cent of the respondents in the first class area also stated they are aware of the penalties associated with non-compliance behaviour as against

36 per cent of the respondents in the second class area. This result could possibly be a factor for the observed disparity in compliance behaviour between the two communities (see Table 4.4.1).

Table 4.2.1 Property rate education and knowledge

	Total	First class area	Second class area	Chi2 p-value
<i>Ever received property rate education</i>				
Yes	17%	25%	8%	0.000***
No	83%	75%	92%	
No of respondents	(106)	(55)	(51)	
<i>Aware of property rate laws</i>				
Yes	47%	51%	43%	0.054*
No	53%	49%	57%	
No of respondents	(91)	(47)	(44)	
<i>Aware of penalties for non-compliance</i>				
Yes	42%	47%	36%	0.061*
No	58%	53%	64%	
No of respondents	(84)	(45)	(39)	

Significant in 10% = *; in 1% = ***

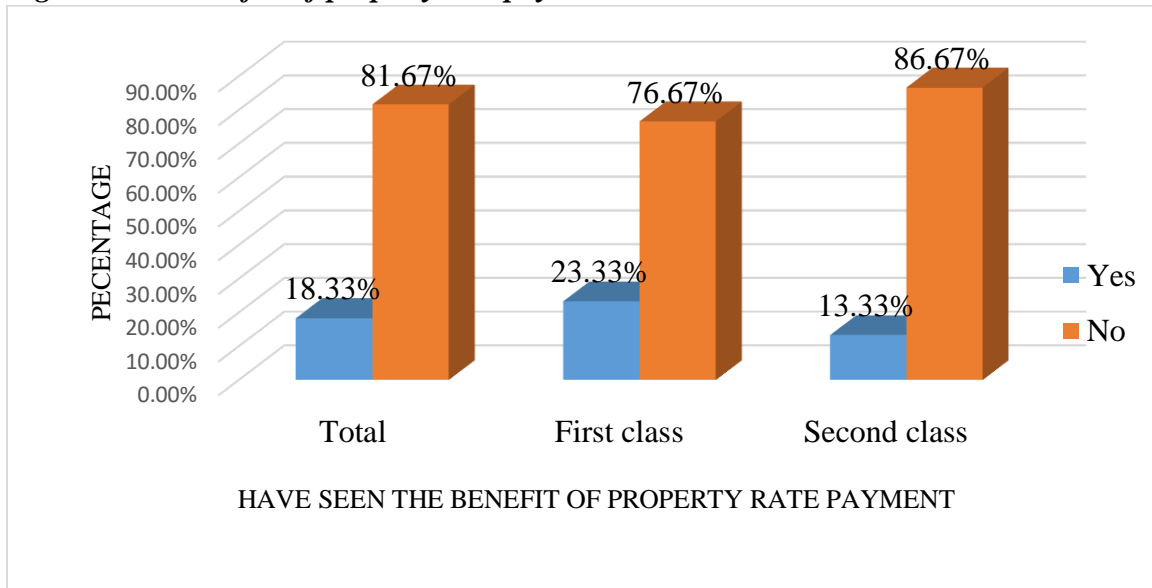
Source: Field data, 2017

4.2.1 Benefit of property rate payment

The study also sought to know if property owners think they are benefiting from their rate payment in terms of community development. This was done because their perception about the property rate revenue usage has implication on individuals' perception of fairness. From figure 4.2.1, 18.33 per cent of property owners indicated they have witnessed the benefit(s) of property rate payment in their community. Most property owners (81.67 per cent) do not know and have not seen the evidence of benefit(s) from payment of property rate in their community.

While 23.33 per cent of property owners in the first class area asserted they have witnessed the benefit(s) of property rate payment, only 13.33 per cent of those in the second class said they have seen the evidence of such benefits. On the basis of distributive justice, property owners in the first class area are more likely to comply with property rate obligation because of the expected benefit(s).

Figure 4.2.1 Benefits of property rate payment



Source: Field data, 2017

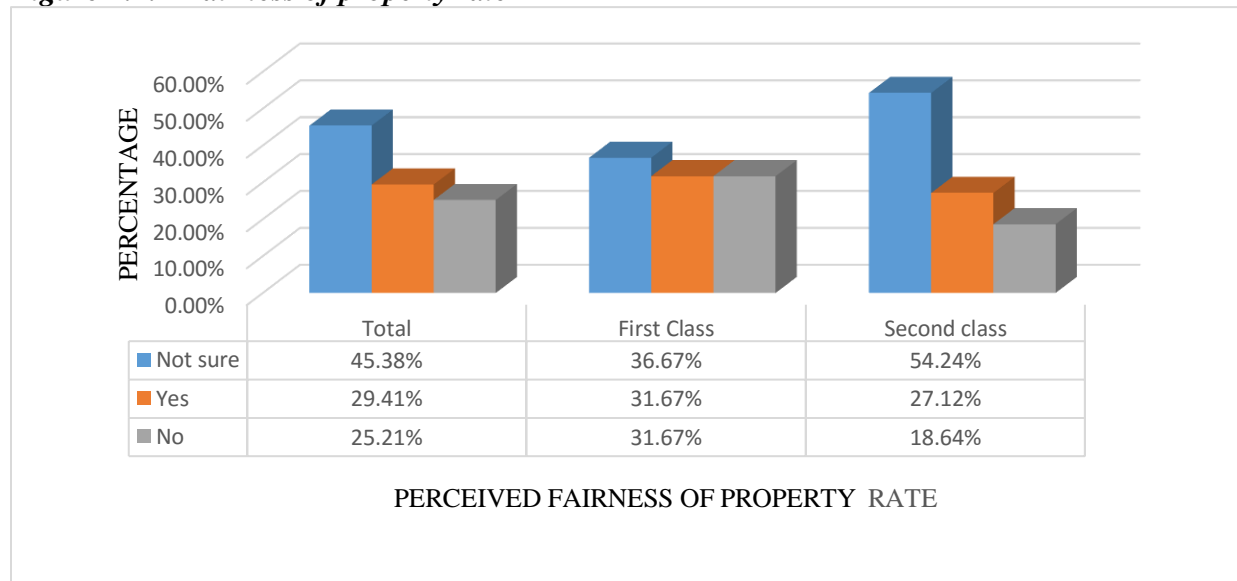
4.2.2 Perception of fairness of property rate

Perception of fairness of tax system has a significant effect on compliance behaviour especially in environment where law enforcement is low. From figure 4.2.2, 45.38 per cent of property owners are not sure whether or not the amount payable as rate is fair. 29.41 per cent think it is fair while 25.21 per cent think it is not fair. Not sure responses constitute majority of the respondents because it is made up of people who either do not understand how the amount was arrived or have never received their demand notice or have never paid property rate thus have no

basis to make judgment of the fairness of it or either wise. With respect to disparity between the two communities, 31.67 per cent of the property owners in the first class residential area perceive their tax rate to be fair compared to 27.12 per cent in the second class area. Further, 36.67 per cent of property owners in the first class area were uncertain whether or not their property rate is fair as against 54.24 per cent of property owners in the second class. This disparity again confirms the assertion made earlier that “not sure” responses may represent those respondents who either have never received bills or paid property rate thus have no basis to make judgment. As observed in table 4.4.1, property rate compliance and receipt of demand notice is very low in the second class area so it is expected that “not sure” proportion will be high compared to the first class area.

By implication, because enforcement of non-compliance sanction is perceived to be low in the study (figure 4.3.1), compliance behaviour in the first class area is expected to be higher relative to the second class area because of the net effect of perception of fairness.

Figure 4.2.2 Fairness of property rate

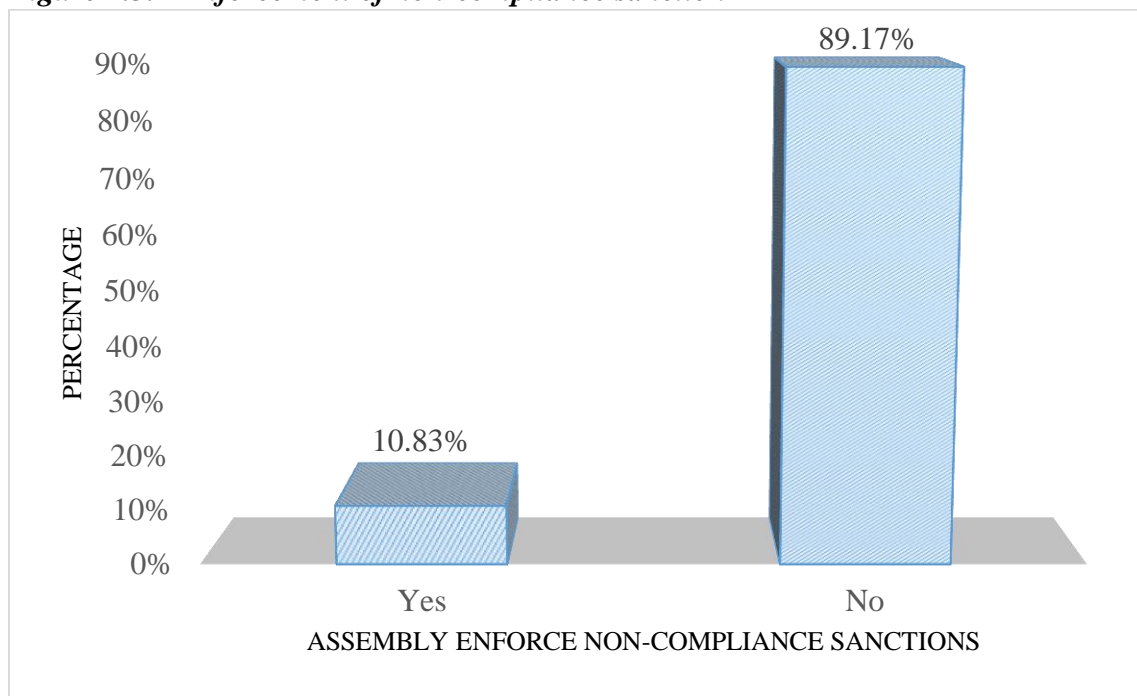


Source: Field data, 2017

4.2 Enforcement of non-compliance sanctions

Property owners' perception about the risk of default detection and punishment is largely influenced by the level of enforcement of non-compliance sanction. Thus, respondents were asked if they think the municipal assembly strictly enforce non-compliance sanctions. Figure 4.3.1 shows that 89.17 per cent of property owners think the assembly does not enforce non-compliance sanctions. Only about 10.83 per cent of property owners think the assembly strictly enforce property rate non-compliance sanctions. The results suggest that, enforcement of non-compliance sanction in the municipality is nearly non-existence.

Figure 4.3.1 Enforcement of non-compliance sanction



Source: Field data, 2017

4.4 Determinants of Property rate compliance

4.4.1 Property rate compliance behaviour

Table 4.4.1 shows that, most of the property owners (72 per cent) have ever paid property rate while 28 per cent have never paid property rate. This result complements the findings of Ayitey *et al* (2013) who noted that 74 per cent of property owners in the Wa municipality have ever paid property rate.

The study found that 83 per cent of property owners in first class residential have ever paid property rate compare to 40 per cent in the second class residential area.

With regards to property rate demand notice, only 45 per cent of respondents interviewed received their property rate demand notice for 2016. Table 4.4.1 also shows that most of the property owners in the first class residential area (70 per cent) received their demand notices for 2016, but in the second class area only 20 per cent of the respondents received their demand notices. This suggests that much of the property rate demand effort is targeted at first class areas relative to the second class areas. This is because data on properties in the second class area is insufficient, as cited by a key informant as the reason some property owners do not receive their demand notice. In an interview, it was noted that some property owners escape the tax net because they do not receive demand notices which is attributed to the outdated property register, which form the basis for determining and issuing property rate demand notice. The key informant asserted, *“you know Agbogba (second class community) is unplanned community so most of the properties there are not captured in our data base”-respondent 2.*

With respect to compliance in 2016, majority of the respondents interviewed representing 63 per cent did not pay their property rate for 2016. This result is directly correlated with receipt of demand notice.

Table 4.4.1 Property rate compliance behaviour

	Total	First class area	Second class area
<i>Have ever paid property rate</i>			
Yes	72%	83%	60%
No	28%	17%	40%
No of respondents	(120)	(60)	(60)
<i>Received demand notice for 2016</i>			
Yes	45%	70%	20%
No	55%	30%	80%
No of respondents	(120)	(60)	(60)
<i>Paid property rate for 2016</i>			
Yes	37%	53%	22%
No	63%	47%	78%
No of respondents	(120)	(60)	(60)

Source: Field data, 2017

4.4.2 Association between demand effort and compliance

Table 4.4.2 shows that most of the property owners who paid property rate in 2016 were those who received their demand notices. Of those who paid their property rate, 93.33 per cent received demand notices and only 6.63 per cent of respondents voluntarily complied. This result shows that voluntary compliance is very low in the study area. In an interview with an officer of municipal revenue office, it was noted that even the few people who voluntary comply do so mostly because they need payment receipt as part of requirements to access bank credit facility.

Table 4.4.2 also shows that 84 per cent of respondents who did not pay property rate in 2016 were those who did not receive their demand notice while those who received their demand notice yet did not pay constituted only 16 per cent. This result is in line with economic theory suggesting that taxpayers behave based on their economic self-interest. They will normally not comply with tax laws when the system allows for non-compliance opportunity. Thus, they only comply because the system places demand on them either through persuasive or coercive means or in anticipation of expected benefit(s). Therefore, the low level of voluntary compliance can be explained by the fact that property owners perceive benefit for compliance to be low if not non-existent. This conclusion is evidenced in figure 4.2.1 which suggests that most property owners have not witnessed any benefit in their community.

Table 4.4.2 Association between demand notice and compliance

Received demand notice	Paid property rate		Total
	No	Yes	
No	63 (84.0)	3 (6.7)	66 (55.00)
Yes	12 (16.0)	42 (93.3)	54 (45.0)
Total	75 (100)	45 (100)	120 (100)

Pearson $\chi^2(1) = 67.9596$ p -value = 0.000

Source: Field data, 2017

Notwithstanding the high compliance rate among those who received their demand notices, it was noted that some property owners refused to honor their obligation because the property rate bill did not come in their names. An officer at the revenue department recounted

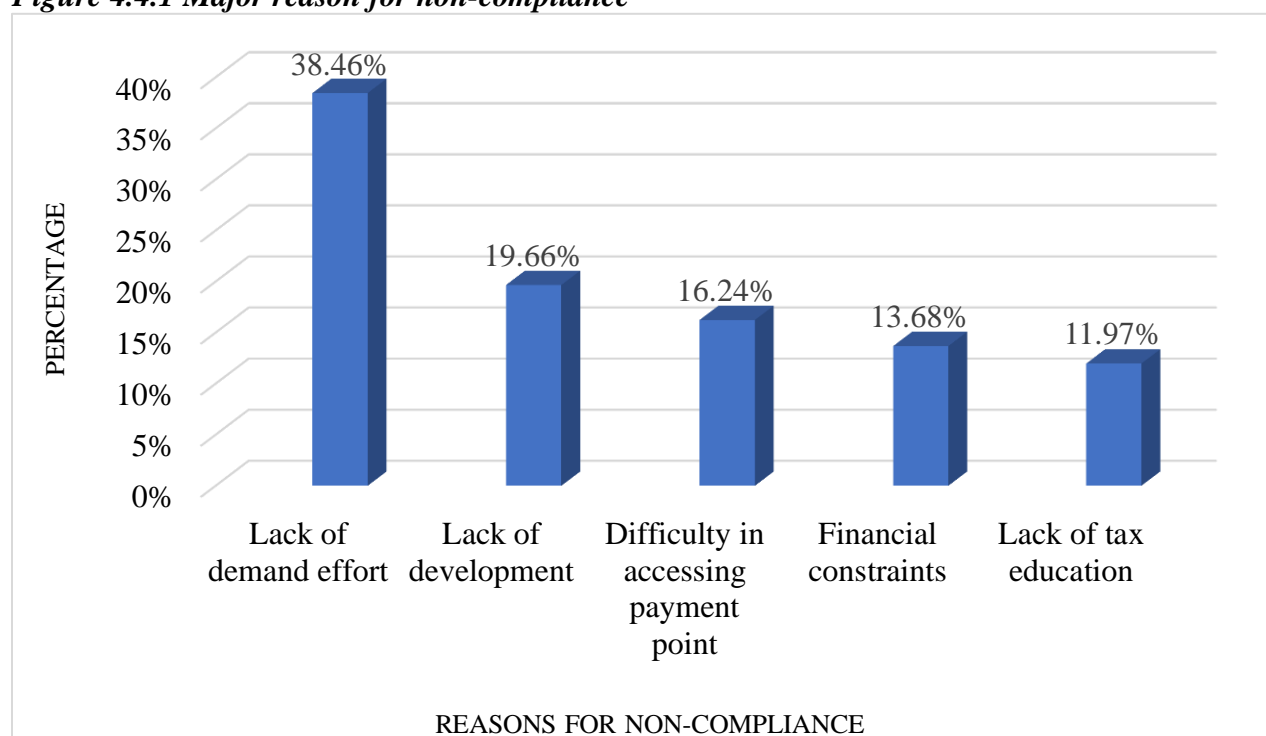
“... yes, they reject the bills because we don’t have their names on it. They will ask you, how do you know the bill was meant for them? So they don’t pay (Respondent 2)”

The rating officer explained that the process of producing the bills start with the valuers who submit to the assembly the rateable value of all properties that have been valued. The valuers do that by first assigning an area code to each community. Various streets are used as landmarks to assign block numbers and every property on the block is given a unique code. Therefore, all properties are identified by their codes and not the name of the owner and the demand notices or property bills are shared using block map. Therefore, the data on properties at the municipal rating office does not contain information on property owners.

4.4.3 Reasons for non-compliance

Respondents were asked to state what they think is the major reason for non-compliance behaviour among property owners. From figure 4.4.1, 34.46 per cent said low effort from the assembly in the distribution and collection of the rate is the major reason for non-compliance. This assertion confirms the observation in table 4.4.2 that 84 per cent of respondents who did not pay property rate in 2016 were those who did not receive their demand notice. However, about 93 per cent of those who paid were those who received demand notice. In other words, people did not pay because they did not receive demand notice. Also, 19 per cent claimed lack of developmental facilities like neighbourhood roads, street lights is the major reason for non-compliance. Further, 16 per cent think is the difficulty in accessing payment point, about 14 per cent said financial constraints and 12 per cent believe lack of proper education on property rate related issues are the major reason.

Figure 4.4.1 Major reason for non-compliance



Source: Field data, 2017

4.4.4 Factors that influence property rate compliance

One of the objectives of this study was to assess factors affecting property rate compliance behaviour in Ghana. To achieve this objective, a logistic regression model was used and the results presented in Table 4.4.3. The logistic regression shows that factors that have significant influence on property rate compliance behaviour for ever paying tax are fairness of the tax system, complexity of the tax system, gender, educational qualification and residential classification of the property owner whereas in 2016, residential class, income level, gender and complexity of tax system were predictors of compliance behaviour. Risk of default detection and penalty, knowledge of property rate laws, property rate education, age and perception of rate utilization were found to have no significant effect on property rate compliance in both case.

Table 4.4.3 Logit regression for the determinants of property rate compliance

VARIABLES	Ever paid property tax		Paid property tax in 2016	
	Coef.	AME	Coef.	AME
Knowledge of property rate law	0.564 (0.569)	0.078 (0.076)	-0.059 (0.623)	-0.007 (0.078)
Fairness of tax system	1.511** (0.719)	0.198** (0.077)	0.913 (0.569)	0.122 (0.077)
Risk of default detection	0.498 (0.481)	0.071 (0.067)	0.907 (0.601)	0.115 (0.074)
Perception of rate utilization	0.226 (0.734)	0.032 (0.101)	0.509 (0.742)	0.067 (0.100)
Complexity of tax system	-1.880*** (0.697)	-0.254*** (0.075)	-2.076*** (0.602)	-0.300*** (0.082)
Age	0.025 (0.019)	0.004 (0.003)	-0.014 (0.020)	-0.002 (0.002)
Females	1.358** (0.643)	0.178** (0.072)	1.764** (0.748)	0.224*** (0.085)
Tertiary education	1.133* (0.631)	0.167* (0.092)	0.675 (0.736)	0.083 (0.087)
Level of income	0.051 (0.100)	0.007 (0.014)	0.341*** (0.122)	0.043*** (0.014)
First class area	0.935* (0.529)	0.138* (0.077)	1.194** (0.544)	0.159** (0.071)
Ever received rate education			1.266 (0.851)	0.176 (0.123)
Constant	-2.650 (1.946)		-4.697** (2.202)	
Observations	120	120	120	120
LR chi2(11)	39.21		64.31	
Prob > chi2	0.000		0.000	
Pseudo R ²	0.39		0.4050	
Log likelihood	-51.925		-47.2318	

Note: Standard errors in parentheses; Significant in 10% = *; in 5% = **; in 1% = ***
AME denotes Average Marginal Effect.

Tax Fairness

From table 4.4,3, the marginal effect of the logistic regression shows that an increase in property owner's perception about the fairness of their property rate increases the likelihood of property owner to have ever paid property rate by 20 percentage points. In 2016, a percentage change in property owner's perception of fairness was found to predict 12 percentage points change in

property rate compliance behaviour yet, statistically insignificant. Notwithstanding the statistical significance, the magnitude and the direction of the observed relationship is in line with economic theory. The disparity could be attributed to low demand effort in 2016 meaning that, all other things being equal, fairness of tax system would have a significant relationship with compliance behaviour. By implication, those property owners who think their tax burden is unreasonable in comparison with other rate payers are likely not to have ever paid property rate. This finding is inconsonance with the views of Kirchler et al (2008) who argued that taxpayers want to be treated relative to their merit. Thus, they tend to comply more when they think they are being treated relative to the comparing individual.

Female

The results also indicate that female property owners are 17.8 percentage points more likely to have ever paid property rate and 22.4 percentage points more likely to have paid property rate last year. These results suggest that, with respect to property rate, female property owners are more compliant compare to male property owners. This observation complements the findings of Richardso & Sawyer (2001), Al-Mamun et al (2014), and Asante & Baba (2011) who also made a similar observation among self-employed income taxpayers in Ghana. The finding also confirms the assertion by Chau & Leung (2009) that females are by nature less aggressive and more conforming to laws including tax obligation. This finding suggests that tax policy targeted females have a better chance of performing than those targeted at males.

Complexity of tax system

Taxpayers understanding of the tax process and the cost compliance is proven to have a negative relationship with compliance behaviour. The result in table 4.4.3 confirms that complexity of the tax system is negatively related with property rate compliance even at 1 per cent alpha level. The result indicates that, a percentage point increase in property owners' perception about the complexity of the property rate administration process reduces the likelihood of property owner to have ever paid property rate by 25 per cent, and by 30 per cent to have paid last year. Property owners who clearly understand compliance procedures and incur no or low compliance cost are more likely to pay their property rate. This implies that a simple tax administration that allows for easy understanding and compliance boost compliance behaviour.

Income level

Income level of property owners was also found to be significantly related with property rate compliance in 2016. Higher income earners were found to be 4 percentage points more likely to comply with property rate obligation than those with low income. The result is intuitive and confirms the findings of Abdul (2001) and Engida & Baisa (2014). Thus, it is expected that as property owners' income increases it will have positive correlation with their compliance behaviour.

Residential class

With respect to residential class of the respondents, it was found that those property owners in the first class residential area are 13 percentage points and 16 percentage points more likely to have ever paid property rate and to have paid property rate in 2016 respectively. These results

are not surprising because much of the property rate demand effort was noted (table 4.4.1) to be targeted towards the first class residential area. Table 4.4.2 also shows that demand effort is a good predictor of compliance behaviour. Thus, one can conclude that property owners in the first class residential areas pay property rate more than those in other residential areas because of the differences in demand effort.

Formal education

Further results in table 4.4.3 also shows that formal education is significantly related (positive) with property rate compliance behaviour for ever paid property rate ($p < 0.1$). Property owners with some form of tertiary education were found to be 16 percentage points more likely to have ever paid property rate than those without. Perhaps, this confirms Chau & Leung (2009) argument that formal education tends to promote compliance because it facilitates peoples' understanding of the tax system.

Tax knowledge

Knowledge of property rate laws was negatively correlated with compliance, but statistically insignificant for 2016, but positive however insignificant for "ever paid" property rate. The result suggests that property owners' knowledge of property rate laws is not a predictor of their property rate compliance behaviour. This result seems to contradict the findings of many scholars including Palil (2010) and Oladipupo & Obazee (2016) who concluded that tax knowledge promote taxpayers sensitivity to tax obligation and compliance. The observed relationship could have been necessitated by narrow definition of 'tax knowledge' given in this

study. Tax knowledge was operationalized to mean property owners awareness of property rate law which does not encapsulate other element of tax knowledge as defined in the literature.

Risks of default detection and penalty

Risk of default detection and penalty was found to be positively related to compliance as expected but not significant. It means that property owners' perception of risk of detection and punishment is not a predictor of their rate compliance behaviour in the study area contrary to the argument by Devos (2008). This result could have been occasioned by the fact that most of the respondents think enforcement of non-compliance sanction in the municipality is non-existent. Therefore, generally there is not much disparity among property owners about the risk of default detection and punishment strong enough to have statistically significant influence on compliance behaviour. Or perhaps this finding confirms the assertion made by Kirchler et al (2008) and that risk of default detection and punitive mechanisms are not sufficient in promoting tax compliance behaviour in the long run.

Perception of rate utilization was not significant perhaps because both communities have similar characteristics and concerns with respect to development. Therefore, there was not much difference about their perception of property rate utilization to significantly influence compliance behaviour.

4.5 Challenges of property rate administration.

Findings from the key informant interviews held indicates that, the main challenges of property rate administration in the study are outdated property register, unwillingness of property owners

to pay their tax and delay in banking revenue collected by revenue contractors. With respect to outdated property register, a key informant stressed that property revaluation is expected to be done every five years to reflect the changes in the market price of the properties and to update the property register. Yet the current register is over ten years without any update because of budget constraints. This situation has led to many property owners paying lesser rate than they should while significant proportion escape the tax net. A key informant recounted:

“our biggest challenge is data. Most properties are unassessed, the current data we have now is over ten years old so all the properties that have been built since that time are not captured and many people are also paying lesser than they should” (respondent 1).

The process to get the land valuation board department of the land commission to undertake revaluation to update the assembly’s property register in recent times has always been a daunting task. He posited,

“As I speak to you now, there is ongoing valuation. Actually we were waiting for the data long ago. There have been several meetings and the last date that was given was somewhere in February this year so that we could use the data to issue rate demand notice but it delayed so we still had to use the old data, which means a lot of people were not covered while others pay less than they are supposed to pay” (respondent 1).

Another challenge noted was the unwillingness of property owners to honor their property rate obligation because they assert the taxes they pay are not put to any profitable use. *“Another*

challenge is that some people do not pay their property rate because of lack of development in their area” (respondent 2). A key informant however refuted this claim suggesting that, the assembly is doing its best to ensure efficient utilization of property rate revenue for the benefit of the entire community.

Also noted was delay in banking revenue collected by revenue contractors. According to the key informant, by the current arrangement, the assembly has an agreement with some private organizations responsible for the distribution and collection of property rate in some selected communities. By this arrangement, revenue contractors are given a commission of 30 per cent of all revenue collected and make payment of the 70 per cent to an agreed bank account. It emerged however that, revenue contractors fail to make payment per the agreement and this situation affects planning of activities of the municipality. *“we also have an issue with delay banking of collected revenues by the contractors and many times this affect our plans” (respondent 2).*

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary of findings in this study. It also presents some conclusions based on the findings, and policy recommendations.

5.1 Summary of findings

The study sought to achieve three main objectives specifically: to assess the knowledge of property rate laws among property owners in the study area; to assess factors affecting property rate compliance behaviour; and to ascertain challenges facing property rate administration in the study area.

5.1.1 Knowledge of property rate laws.

The study found that knowledge of property rate laws among property owners in the municipality is relatively low. More than half (53 per cent) of property owners were not aware of property rate laws as stated in Act of parliament (1993), Act 462. This was due to the fact that most property owners (83 per cent have) never received any form of property rate education from the Ga East Municipal Assembly.

The study also found that most property owners in the municipality were not aware of the penalties associated with property rate non-compliance. More than half (58 per cent) of property owners were not aware of penalties of non-compliance with only 42 per cent having knowledge of penalties of non-compliance behaviour.

5.1.2 Factors affecting property rate compliance behaviour.

Results of the logistic regression model indicates that factors affecting property rate compliance behaviour in the municipality includes fairness of the property rate, complexity of the tax system, income, gender, educational qualification and residential classification of the property owner.

A major factor of property rate compliance behaviour found was complexity of the property rate system. A percentage change in property owners' perception about the complexity of the property rate system was found to be associated with 25 and 30 percentage points change in the compliance behaviour for ever paid property rate and paid property rate in 2016 respectively. No significant relationship was found between tax knowledge and compliance behaviour in this study. This finding is however inconclusive because of the narrow definition of tax knowledge in this study.

5.1.3 Challenges facing property administration

Major challenges in the property rate administration noted were outdated property register, property owners' unwillingness to comply with property rate obligation and delay in banking collected revenue by revenue contractors. The study also found that, the current property register at the municipal assembly used for generating property rate is way outdated. For this reason, many property owners escape the tax net while others pay less than they should.

5.2 Conclusion

This study was carried out in the Ga East municipal assembly with the aim of assessing factors affecting property rate compliance behaviour. The study adopted triangulation approach by combining quantitative and qualitative methodology.

The study concludes that most property owners do not pay property rate because there is little effort from the assembly to collect it. For instance, in 2016 only 45 per cent of property owners received their demand notices out of which about 78 per cent paid, and also constitute 93 per cent of those who paid property rate. To add to the point, significant majority of the respondents indicated that lack of demand effort from the assembly is the major reason for property rate non-compliance behaviour among property owners.

5.3 Policy Recommendations

Payment point closer to rate payers

Complexity of tax system was found to be negatively related with rate compliance, and also some property owners stated that difficulty in accessing payment is a major reason for non-compliance. In the current arrangement, except for few areas where revenue contractors are assigned, property owners had to travel to the office of the municipal assembly to make their payment. This increases compliance cost and thus discourages compliance. In addressing this challenge, the study recommends adoption of non-human contact payment arrangement like mobile money payment system in which neither an agent of the assembly has to travel to collect the rate nor the property owners travelling to the assembly in order to make payment. This will help reduce the cost of compliance and enforcement of property rate.

Increase demand effort

The study found property rate demand effort in the municipality to be low resulting in many property owners not receiving their demand notices. Aside intensifying demand effort and periodic revaluation of properties which hardly happens because of budget constraints, officers who are responsible for distributing bills should be tasked to report on properties that do not receive bills within their area coverage in the course of their distribution. This report will help the assembly to update its data base and could demand a minimum rate payable in the respective community in the short run while appropriate steps are taking to conduct property valuation.

Public education

Every rational human being by nature does cost benefit analysis on every decision that affect their income. Therefore, taxpayers take into consideration the benefits for the tax payment in making a tax compliance decision. The study therefore recommends that the municipal assembly under take proper education of property owners. In doing so, the study recommends adoption of innovative channels and platforms that reaches the target population such as newsletters to property owners. The content of the education should appropriately address issues that borders on the benefits for rate payment which affect property owners' perception about the fairness of the property rate administration system.

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APPENDIX I

INSTITUTE OF STATISTICAL, SOCIAL AND ECONOMIC RESEARCH

UNIVERSITY OF GHANA

QUESTIONNAIRE

This is an academic research survey which examines *factor affecting property tax compliance behaviour in Ghana* using Ga East Municipality as study area. In order to make this endeavor a success, I will be pleased if you can assist in this study by completing this questionnaire.

SECTION A – Socio-Economic Data

In this section you are kindly required to indicate your appropriate response by circling the option that applies to you.

Respondent Valuation Code:

1. Sex of the respondent. 1. Male 2. Female
2. Age of the respondent
3. Marital status of the respondent. 1. Married 2. Widow
3. Divorce 4. Single
4. Highest level of educational
1. No formal education 2. Basic level 3. Secondary
4. Polytechnic 5. University level 6. Other Tertiary
5. Occupational Status. 1. Private Sector 2. Public sector 3. Self employed
4. Unemployed
6. Which of these categories best describe you average monthly income from all sources
 1. Below 1,000Gh
 2. 1,001- 1,500Gh
 3. 1,501- 2,000Gh
 4. 2,001-2,500Gh
 5. 2,501-3,000Gh
 6. 3,001-3,500Gh
 7. 3,501-4,000Gh
 8. 4,001-4,500Gh
 9. 4,501-5,000Gh
 10. above 5000Gh

SECTION B – Property tax knowledge

In this section, you are presented with a list of claims which seeks to assess your level of knowledge of the property rate law in Ghana. Kindly indicate your appropriate response (Strongly Agree, Agree, Not Sure, Disagree or Strongly Disagree) to the assertions by selecting (tick) one of the options provided.

		Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
7.	I have ever received some form of property rate education from the assembly	1	2	3	4	5
8.	I know what the assembly uses my property rate to do	1	2	3	4	5
9.	I am fully aware of the property rate laws in Ghana	1	2	3	4	5
10.	I know the penalties associated with non-compliance	1	2	3	4	5
11.	I can be imprisoned for property rate non-compliance	1	2	3	4	5
12.	The assembly can apply to court for order to sell my property for non-compliance	1	2	3	4	5
13.	I think the assembly is doing enough to promote property tax knowledge	1	2	3	4	5

SECTION C – property tax administration system

Section C seeks to assess your understanding and perception of the property rate administration system. Kindly indicate your degree of agreement or disagreement to the following claims by selecting the appropriate option.

S/N		Strongly agree	Agree	Not sure	Disagree	Strongly disagree
14.	I understand how my property rate was calculated	1	2	3	4	5
15.	I clearly understand the procedures to pay my property rate	1	2	3	4	5
16.	I think the payment process is complex	1	2	3	4	5
17.	I think the means of payment is not customer friendly hence discourages me	1	2	3	4	5

18	I have witnessed some benefits of property rate payment in my community	1	2	3	4	5
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SECTION D – Perception about the risk of detection and penalty

In this section, you are kindly required to indicate your degree of agreement or disagreement to the following claims that truly reflect your perception about the risk of detection and penalty associated with non-compliance behaviour

S/N		Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
19.	I think the amount I pay as property rate is fair	1	2	3	4	5
20.	I think non-compliance can easily be detected	1	2	3	4	5
21.	The assembly strictly enforces non-compliance sanction	1	2	3	4	5
22.	I think non-compliance penalties are severe enough to deter non-compliant	1	2	3	4	5
23.	I have ever been a victim of non-compliance sanction	1	2	3	4	5
24.	I know of someone who has been a victim of non-compliance sanction	1	2	3	4	5
25.	I know of someone/people who have default without sanction	1	2	3	4	5
26.	I think the assembly is doing well with enforcement of non-compliance sanction	1	2	3	4	5

SECTION E – Property tax compliance behaviour

Kindly respond to the questions in this section by selecting the option that best applies to you.

27. Community of the respondent 1. Agbogba 2. Haatso 3. Ashongman
4. Others (state).....
28. Type of property 1. Residential 2. Commercial
29. Property right of the respondent. 1. Personally own 2. Inherited property
3. Family property 4. Care taker

30. How much do you think is the approximate value of your property. Please give amount in Ghana Cedis in the box [_____]

31. Have you ever paid property rate? 1. Yes 2. No

32. Did you receive property rate demand notice for 2016? 1. Yes 2. No

33. Did you pay your property rate for 2016? 1. Yes 2. No

34. In your view what is the major reason for non-compliance behaviour among property rate payees

1. Lack of demand effort
2. Financial constraints
3. Difficulty in accessing payment point
4. Lack of development in the area
5. No level of education

Thank you very much for participating in this survey.

APPENDIX II

INSTITUTE OF STATISTICAL, SOCIAL AND ECONOMIC RESEARCH UNIVERSITY OF GHANA, LEGON

Question Guide

Topic: Assessing factors affecting property rate compliance behaviour in Ghana; A case study of Ga East Municipality

1 Introduction

2 Can you tell me what the property rate is all about?

3 What are the internal mechanisms for property rate administration? How do you determine the rate to be paid, distributing bills and collection of property rate?

4. What are the penalties associated with non-compliance? (At what point do you regard someone as non-compliant)

5. To what extent does the assembly educate property owners about the property rate law? (What are the challenges, what approach do adopt for the education)

6. What are the mechanism for enforcing non-compliance sanctions?

7. What are the challenges facing property rate administration in the municipality