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COLLEGE OF ARTS AND SOCIAL SCIENCES

SCHOOL OF BUSINESS

TAX NON-COMPLIANCE IN THE INFORMAL SECTOR: A CASE OF SMALL-AND-MEDIUM-SCALED ENTERPRISES AT SUAME MAGAZINE IN THE KUMASI METROPOLIS

BY

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(ACCOUNTING OPTION)

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DECLARATION

I hereby declare that with the exception of some information and documents that were cited and duly acknowledged, this study is my own work towards the MBA and that, to the best of my knowledge it contains no other materials previously published by another person nor materials which has been accepted for the award of any degree of this University.

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Head of Department   **Signature**   **Date**

DEDICATION

This work is dedicated to my beloved husband, Charles Agyei Yeboah and my children Melody, Agyei Yeboah, Henry Tutu Yeboah, Bright Agyei Yeboah, Edwina Agyei Yeboah, Persis Baaba Agyei Yeboah and Charles Agyei Yeboah Jnr, whose encouragement, support and prayers motivated me to complete this work.

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I would like to render my profound gratitude to the Almighty God for His grace and guidance that has made it possible to do this work.

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My appreciation also goes to my husband, Charles Agyei Yeboah for his physical and spiritual support without which I could not have been able to complete this work.

Finally, I wish to acknowledge the authors whose idea have been useful in the production of my work.

ABSTRACT

Tax non-compliance remains a predicament that needs to be tackled especially within the large zones of small businesses. From the behavioral theoretical perspective, this study was carried out to find out how and why small business tax payers at the Suame Magazine do or not comply with the tax laws applicable to small and medium scaled enterprises (SMEs) in Ghana.

The study employed a purposive sampling technique to draw out 200 SMEs from Suame Magazine for questionnaires administration and 3 top officials of Suame Small Taxpayers' Office for semi-structured interviews. By subjecting the data to descriptive statistical, Spearman correlation and probit regression analyses, it was found that the taxpayers are likely to submit their tax returns late and pay their taxes after due dates, along with the observation that close to half of the study subjects have not yet registered their businesses. From the taxpayer's perspective, tax non-compliance is likely to occur if the tax payer is non-religious person and if the tax payer considers detection probability to be high while the perception of high compliance costs and tax knowledge increase non-compliance probability. Moreover, from the tax administrator's viewpoint, the compliance is likely to increase if prosecution is likely while non-compliance is most likely to happen if the tax payer sees no direct benefit accruing to him/her and if the level of his/her understanding of the need to pay is missing.

The study recommended that the Tax Authorities should enter into close partnership with the police and religious leaders to improve detection of non-compliance rates and tax morale respectively. Further studies to extend this to cover larger sample and wider geographical spread were also recommended.

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<p style="text-align:center">**GENERAL INTRODUCTION**</p>

1.0 Background of the study

The issue of tax compliance or non-compliance has been perennial for fiscal managers the world over. Up to today, neither developed countries nor developing ones are precluded when the problem of non-compliance with tax regulations is put forward for discussion. Meanwhile the issue compounds when considering taxation of the small businesses as often times tax administrators and government officials put out skewed and disproportionate focus on small businesses and ignorantly narrow all the attention to the large and more formal businesses with the ardent hope of maximizing revenue. But this might have been acceptable four or five decades back as now small businesses across the globe continue to be the engine of growth for many economies and hence, must be appropriately taxed. To do this, understanding why small business taxpayers do or do not pay taxes is essentially required to formulate and devise appropriate mechanisms and strategies to accomplish just that. In order to set up proper and workable policies to increase government revenue, it is important to recognize that within the confines of a single jurisdiction one is likely to come to the knowledge of differing levels and/or forms of non-compliance depending on the relevant demographics, the type of taxes, the nature of the taxpayers, among others. Thus, knowing why people and businesses pay taxes is as important as obtaining insight into why they do not. Using experimental research design, Alm, McClelland and Schulze (1991) highlight that payment of taxes is likely if individuals realize the prevalence of low audit probability. Because individuals value the public goods that are financed by the amount of taxes they pay, compliance does not just occur since taxpayers consider tax evasion as a wrongful act. Theoretically, tax

compliance occurs because there are factors that deter non-compliance such as if the tax payer assesses that the cost of being subject to tax audit and/or bearing penalty is lower than the tax savings obtained for not complying, and also for psychological and moral reasons that taxes must be paid.

Tax monies continue to remain as a major and relatively safer source of finance for funding public expenditure of the government. In its quest to ensure the maximization of tax revenue, Ghana has embarked upon series of structural and administrative adjustments, both on evolutionary and revolutionary dimensions, especially since the implementation of the World Bank and International Monetary Fund supported Structural Adjustment Program (SAP) in the early 1980's (Ohemeng and Owusu, 2013). These adjustments have now ultimately led Ghana to re-adopt a claimed modern *Revenue Authority* model since 2010, a model which was unsuccessfully introduced in the 1980's during the military regimes (Ohemeng and Owusu, 2013). Now the Ghana's tax system is manned under the management, supervision and authority of the Ghana Revenue Authority. Admittedly, positive outturns have been reported following the adoption of this form of tax administration as Ghana Revenue Authority (GRA) exceeded its revenue target in the 2012 fiscal year (Government of Ghana, 2012). However, the total tax revenue remains a fraction of the country's gross domestic product (GDP) to which small businesses contribute more than half. An uglier picture is revealed by the 2015 National Budget of Ghana of the woeful level of public debt of close to 61% of GDP the country finds itself at around September, 2014. By these, the urgent need to strengthen the domestic revenue generation base cannot be over emphasized.

The need for, and the willingness, the attitude and the ability of taxpayers regarding compliance with tax laws in developing countries, like Ghana, and especially such less organized sector as the small business sector which predominantly falls within the

informal sectorial framework should be guided up since the sector forms a chunk proportion of the country's economic activities but the same which records the highest non-compliance and evasion (World Bank, 2002). Efforts have been made to truly formalize the small business sector and also capture it into the tax net of Ghana by the introduction of different tax reforms such as the Vehicle Income Tax (VIT), the Value-Added Tax (VAT) Flat Rate Scheme (VFRS), and Tax Stamp that are particularly fitted into the context of the vast majority with informal structure within the sector. The reforms were meant to reduce the compliance costs as relatively lower level of paper work is required by them and also to reduce the actual tax burdens as these request the small businesses to pay lower tax rates. Even these would not incentivize many players in this sector to fulfill their tax obligations as still Ghana lingers with insufficient tax revenue obtained especially from this sector. Non-compliance may take the forms of failure to pay the taxes/penalty, failure to file one's returns, failure to file returns within time, failure to file accurate returns, or even failure to register under the tax laws. The reasons for this indecent disposition remain a puzzle to overcome. An attempt made by Ohemeng and Owusu (2013) to investigate among other things the reasons why people evade taxes in Ghana across the country reveals that people actually evade tax or may evade tax because of the perception that the Ghana's tax system is unfair, tax rates are too high, government misuses public funds and tax officials are corrupt. They also point out that the level of evasion is divergent if it is preconditioned on various demographical factors.

1.1 Problem statement

Given the contribution of tax revenues towards advancing economic agenda all over the world, many tax researchers have paid keen attention to understanding tax non-compliance behaviour most especially in advanced economies (Abdul Jabbar, 2009)

such as the US. A few similar studies have been carried out in Ghana's context (e.g. Ayee, 2007; Armah-Attoh and Awal, 2013; Boampong, 2015) but none of these have taken as broad perspective as concurrently handling different forms of tax non-compliance in a single study. In particular, Ayee (2007) restricted his study to tax compliance behaviour among only corporate taxpayers, Armah-Attoh and Awal (2013) to individual taxpayers and Boampong (2015) to small businesses using a single form of tax non-compliance behaviour. Conspicuously, these authors did not approach their studies employing diverse measures to understanding tax non-compliance dispositions, the gap which this present study seeks to fill up. Moreover, review of extant literature indicates that many of these studies have disproportionately focused non-compliance research on the broad national level rather than on specific sectors.

It is against this backdrop that the study seeks to explore to gain insight into the tax compliance and non-compliance behaviour among taxpayers at a decentralized level, SMEs at the Suame Magazine. Obtaining such understanding of the non-compliance behavioural pattern of very similar businesses clustered at the same location as Suame Magazine should better lead to richer and more workable policy recommendations.

1.2 Research objectives and research questions

The main purpose of this study is to explore the extent of and the form of tax compliance or non-compliance exhibited among small business operators at Suame Magazine in Kumasi and the reason why they do or do not comply with Ghana's tax laws.

Specifically, the following objectives are pursued in this study:

1. To identify what forms of tax non-compliance are exhibited by SMEs at Suame Magazine;

2. To establish the determinants of tax non-compliance among SMEs Suame Magazine from the taxpayer's perspective; and

3. To find out the reasons why SMEs at Suame Magazine do or do not comply with tax requirements from the tax administrator's perspective.

In relation to the above objectives, the following research questions were raised:

1. In what forms do SMEs at Suame Magazine fail to comply with tax requirements?

2. What factors, from the taxpayer's perspective, account for tax non-compliance among SMEs at the Suame Magazine?

3. From the tax officer's perspective, what reasons underscore tax non-compliance or compliance behaviour among SMEs at Suame Magazine?

1.3 Significance of the study

The contributions this study attempts to make include the following:

1. The study findings on the causes of tax non-compliance would lead to policy revamping and/or consolidation such as enabling the tax administrators (both Ghana Revenue Authority and the local authority in the Kumasi locality) and other responsible authorities to know the kinds of fixing that needs to be made in the current tax system in order to improve on the level of compliance attained now for small-scaled businesses at Suame Magazine and in general. Such administrative amendments or consolidations may include the kind of tax education programmes to pursue, the frequency of such administration pursuit, the target group for the education, the enforcement mechanisms to introduce or be tightened or be relieved, the kinds of fundamental tax reforms required, among a lot more.

2. By identifying the observed patterns of tax noncompliance across characteristics studied, this paper will provide guidelines to aid the tax authority in enforcing

income tax compliance. Audits can be directed towards those who are most likely to be in noncompliance with the income tax code. The results of such audits could then be used to identify the source of noncompliance – overstated expenses or understated income – which would aid in designing tax policy focused on reducing this activity

3. Again, the findings of this study would push through a new form of knowledge from a developing country setting into the existing literature on tax compliance which unsurprisingly has up to date been dominated by results of studies done on developed countries.

4. The findings of the study, moreover, would give a starting point from where future researches may be undertaken; especially the recommendations made in the last chapter of this paper alongside the limitations highlighted in this work set the basis for any further studies in this research area.

1.4 Research methodology

The study employed fundamentally primary data which were collected using researcher administered questionnaires under a survey research strategy. Data were collected from SMEs operating at Suame Magazine, Kumasi. The study originally targeted 200 respondents. The data collected were subjected to purely quantitative analysis; especially, when it came to detecting the association between previously empirically and theoretically obtained factors responsible for tax non-compliance/compliance and the level of tax non-compliance/compliance exhibited, regression model was used to establish that.

1.5 Scope and limitation of the study

The study does not intend to cover all forms of taxes administered in Ghana with which the targeted study group is concerned; the forms of taxes of interest in this work are business income tax, tax stamp and value-added tax (and the VFRS) but exclude any

employment income tax, investment income tax, capital gains tax, gift tax, vehicle income tax, customs and excise duties and any other than the two which are the focus of this study. The tax forms picked tobe the focus of this study relate to the self-employed SME taxpayer and that all are administered by the Ghana Revenue Authority. Also, it all requires to some extent the same nature of accounting works to be done in complying with them. Thus, these three tax forms are the scope for this work.

The study is also limited to the sample employed for this study as any attempt to generalize the findings for all SMEs in Ghana or Kumasi might to be noisy. The generalizability of the findings may even further be blighted by the fact that the political orientation of the Kumasi based taxpayers may have led to the provision of over-exaggerated or downplayed responses to some questions.

The data gathered are also collected at a point in time but not over a period of time. Longitudinal data may provide significantly different results. Moreover, the dominance of the use of quantitative analysis using models with their associated "challengeable" assumptions is also a limitation to this work.

Finally, as with most studies that seek "intrusion" into the affairs of especially smaller firms the willingness of the study subject to provide responses to questions is low and even more worrying dishonest answers to questions may be obtained from the willing ones.

1.6 Organization of the study

The rest of this material is organized as follows:

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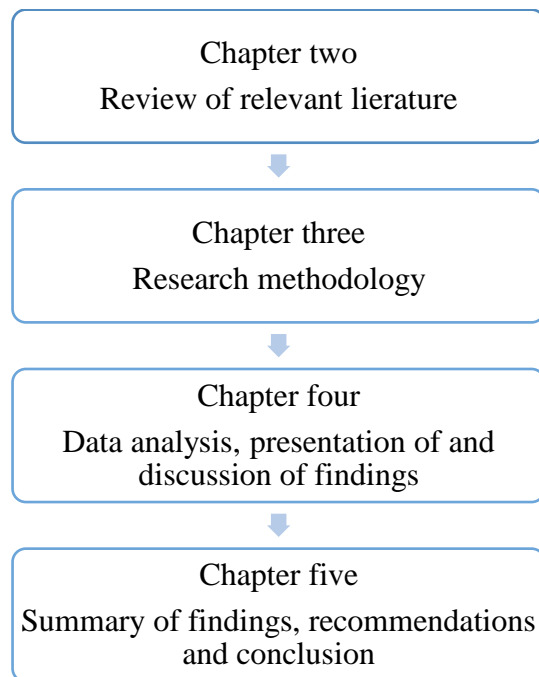
CHAPTER TWO

REVIEW OF PRIOR LITERATURE

2.0 Introduction

The previous chapter dealt with the study background, the statement of the research problem, the related research questions and objectives, the significance of the study, summary of the research methodology, the scope of the study and the study limitations.

This chapter, however, discusses the relevant literature that reveals the relevant institutional framework of the study, the theoretical foundation the underscores the study, and the various empirical support for the research approach and elements adopted in this study.

2.1 Definition of informal sector and small business

Since the discovery of the concept 'informal sector' in Africa, it has not lent itself to a comprehensive and a universally accepted definition. A number of attempts by different researchers and national authorities (i.e. governments) to define the concept have resulted in diverse definitions. Dominik and Schneider (2008) stated that, 'attempts to measure the shadow economy (i.e. informal sector) first faced the problem of defining it'. There are varied definitions of the concept in the existing literature. Some definitions given in the literature are presented as follows:

(a) "All economic activities that contribute to the officially calculated gross national product but currently unregistered". (Feige, 1994).

(b) "Market-based production of goods and services, whether legal or illegal, that escapes detection in the official estimates of the gross domestic product".(Smith, 1994)

(c) "Unregulated economic enterprises or activities" (Hart, 1970).

The research setting, Suame Magazine is considered as informal sector for three reasons:

a. The majority of artisans have not registered their businesses

b. The majority of artisans learned their trade through apprenticeships, not formal school

c. The majority of artisans have no connection to established firms, and many of the repairs and alterations done on vehicles would not meet the standards of original manufacturers (Waldman-Brown et al. undated)

2.2 The structure of Ghana's tax system for the informal sector

Taxing the informal sector has been one of the most difficult knots to untie by economies the world over across regimes of governance. As indicated by World Bank (2002), the government of Ghana persistently loses millions of Ghana cedis, if not trillions, in tax revenue from the informal sector (at the time it is the old cedi that was in use so they mentioned billion and trillion respectively).Attempts have been made over the years to at least minimize the level of evasion in the sector – often placarded as "difficult to tax" by various governments.

The first of these many attempts in Ghana to tax the sector was in 1963, when the Standard Assessment Act, 1963, Act 205 was enacted. This Act has gone through various amendments over the years before it was finally consolidated into the Internal Revenue Act, 592, 2000. The standard assessment was a scheme in which a fixed lump-sum tax was levied on individuals and businesses on the basis of business activity in which they engaged. The levies correspond to some average income level presumed to be earned by members of a particular occupation or business grouping. In principle, the standard assessments were payments on accounts to be set off against the amount of income tax actually payable. However, in practice and with the tacit acceptance of the

tax authorities, the standard assessments increasingly represented the final tax liabilities from the various occupational groups (World Bank, 2002; Ofori, 2009).

In Ghana, some small-scaled businesses and the informal sector operators belong to some occupational groupings. Such groupings include Ghana Private Road Transport Union, market women association, seamstresses and tailors union, hawkers association, various associations clustering at places like Suame Magazine. The members of these groupings found it cumbersome in meeting the annual lump-sum requirements under the Standard Assessment Scheme.

The tax policy of the informal sector therefore took a new direction and was swallowed up into the normal practice of provisional assessment and demanding quarterly payments (Ofori, 2009). This was similarly difficult for taxpayers in the informal sector and again resulted in massive non-compliance. Thus in 1986 when the government under the Economic Recovery Programme (ERP) and Structural Adjustment Programme (SAP) undertook tax reforms with the view to strengthening the administrative structures of the tax institutions, there was the need to review the policy objective that sought to increase government revenue by broadening the tax base so that the tax rates could be systematically lowered to reduce the tax burden (World Bank, 2002). The standard assessment scheme was reintroduced in an improved form which became known as 'Identifiable Grouping Taxation'. The pilot effort started with the large transport sector and led the government into enacting the Income Tax Amendment Law, 1987, PNDC Law 177. The law decreed that every person who owned any specified vehicle was to pay tax at a specified rate. Two categories of tax payments were identified. One category was made up of taxis and intra-city commuter services were made to pay specific cedi amounts on daily basis according to passenger capacity. The other was made up of long

distance and cargo trucks which were required to pay a certain percentage of their gross takings per trip.

While merits such as simple to administer, improved horizontal equity, minimized opportunities for corruption, increased compliance rate in the informal sector, improved taxpayer identification, many weaknesses were identified such as increased embezzlement of tax monies by grouping heads, exorbitant collection costs and requirement of high literacy rate which was unavailable (World Bank, 2002).

Tax stamp has also been introduced to curb the evasion menace in the sector. Indeed, some informal sector operators earn income from all the three main sources of income under the tax law namely employment, business and investment yet pay absolutely nothing in the form of tax. The effort at getting more informal sector to pay tax has necessitated the introduction of a new scheme called 'tax stamp'. The tax stamp is a type of standard assessment scheme which imposes a lump-sum of tax paid quarterly. The tax stamp is being operated by IRS itself unlike in the case of identifiable groupings taxation where agents were used to collect tax on behalf of IRS. This system has come to some extent correct the weaknesses in the predecessor systems

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2.3 The concept of tax compliance and non-compliance

The exact meaning of tax compliance has been defined in various ways. For example, Andreoni, Erard, and Feinstein (1998) claimed that tax compliance should be defined as taxpayers' willingness to obey tax laws in order to obtain the economy equilibrium of a country. Kirchler (2007) perceived a simpler definition in which tax compliance is defined as the most neutral term to describe taxpayers' willingness to pay their taxes. More specifically, Alm (1991) defined tax compliance as the accurate reporting of one's income and claiming of expenses in line with stipulated tax laws. Conversely and by implication, tax non-compliance is said to indicate the unwillingness and/or failure of taxpayers to accurately report or pay tax.

More expansively, Roth, Scholz and Witte (1989) and Abdul Jabbar (2009) described tax compliance to suggest adherence to tax reporting requirements; that is, that the tax payer files all required tax returns at the proper time and that the returns accurately report tax liability in accordance with the tax laws, regulations and court decisions applicable at the time the return is filed. Thus, they see non-compliance as failure to fulfill tax reporting requirements. Still others pushing tax non-compliance to moral grounds say of tax evasion, cheating, misreporting and error as all falling under the umbrella of tax non-compliance (Long and Swingen, 1991). Often times the terms tax evasion and tax non-compliance are loosely used interchangeably the two have some differences between them, For instance, James and Alley (2004) asserted that non-compliance is more than tax evasion and it is also includes some forms of tax avoidance. James and Alley (2004) defined tax evasion as 'the attempt to reduce tax liability by illegal means while tax avoidance is defined as 'reducing taxation by legal means. Similarly, Kasipillai, Aripin and Amran (2003) perceived tax evasion as actions which result in lower taxes than are actually owed (p. 135) while tax avoidance, denotes the taxpayers' creativity to arrange

his tax affairs in a proper manner based on law and regulation (any provision not violated) so as to reduce his tax bill, and this is (or should be) acceptable in view of the tax administrator. As reduced to the diagram below, tax non-compliance may thus be deliberate or non-intentional (Kinsey 1984).

Figure 1: Structure of tax non-compliance
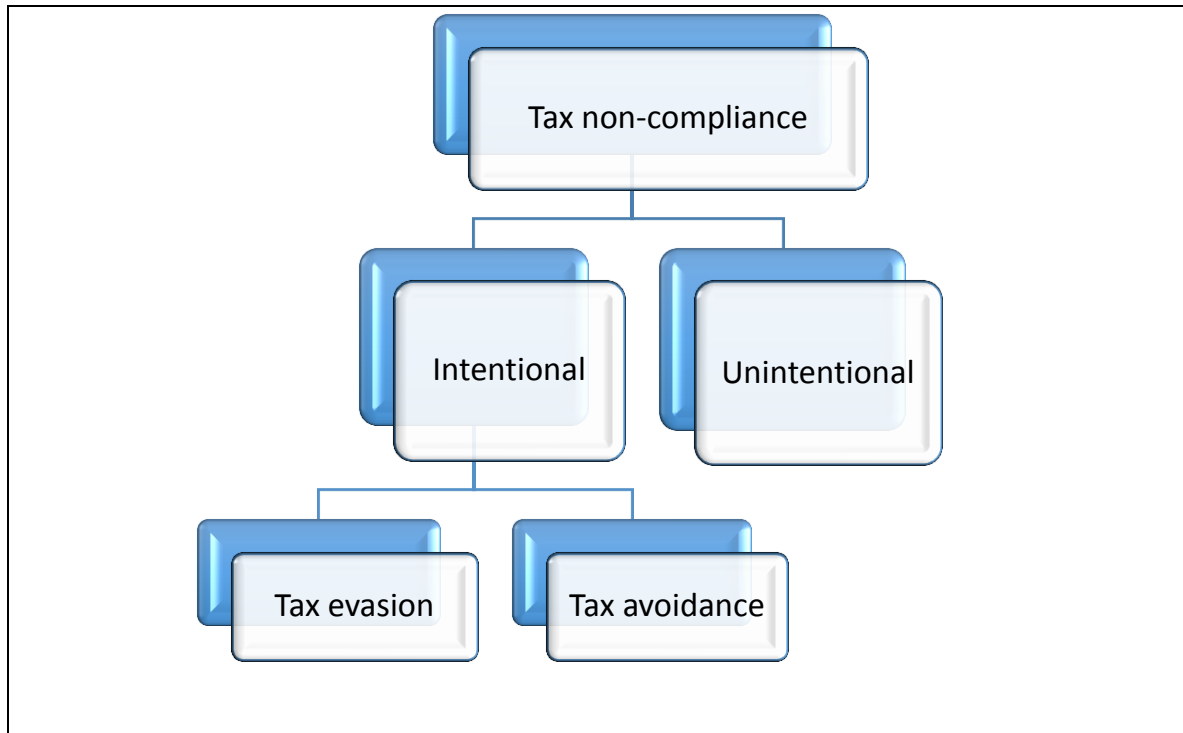
Source: Developed by author from the literature

Consistent with other studies such as Abdul Jabbar (2009) and many others (see references in Abdul Jabbar, 2009), the researcher resolved to deal with the whole tax non-compliance without drawing any distinction between intentional and illegal non-compliance (tax evasion) and unintentional and legal (tax avoidance).

2.4 Tax compliance models

In explaining taxpayer's compliance behavior, that is, the reasons why taxpayers comply or do not comply, there are two broad approaches which researchers have used to explain

compliance or non-compliance behavior, namely: Economic Deterrence Model and Fiscal Psychology Model.

2.4.1 Economic deterrence models

The basic theoretical model applied in the economic approach is built on the work of Becker (1968) who analysed criminal behaviour using an economic framework known as the economics-of-crime model. Allingham and Sandmo first employed this model in the context of tax compliance study in 1972. The model is based on an expected utility theory and a deterrence theory. The expected utility theory views taxpayers as perfectly amoral utility maximisers, who choose to evade taxes whenever the expected gain exceeds the cost of evasion (Allingham & Sandmo, 1972). The deterrence theory is concerned with the effects of sanctions and sanction threats, where an increase in the severity of penalties and the certainty of their imposition will discourage undesirable behaviour. Their theoretical analysis suggested that punishment and/or sanctions determined taxpayer compliance behaviour and that an increase in the penalty rate and a greater probability of detection would result in lower non-compliance.

Almost all economic approaches to tax compliance continued with this framework. Within the framework, the tax rate, the probability of detection and the penalty structure determine the monetary cost of compliance, which in turn determines taxpayer compliance behaviour. This framework was configured as the financial self-interest model (Figure 2). It has become a prominent approach in investigating taxpayer compliance behaviour. Based on this model, compliance behaviour was determined by the rational economic consideration of perceived costs and benefits derived from the specific action of taxpayers.

Figure 2: Financial Self-Interest Model
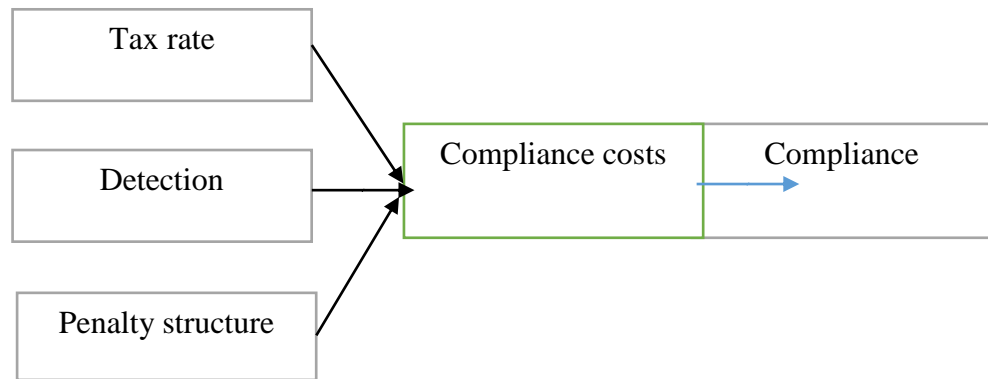
Source: Fischer, Wartick and Mark (1992)

2.4.2 Fiscal Psychology (Behavioral) Model

In contrast, the behavioral approach assumes that individuals are not simply independent, selfish, utility maximizes but that they interact according to differing attitudes, beliefs, norms and roles (Elffers, 1991). The behavioral perspective incorporates sociological and psychological factors, such as age, gender, ethnicity, education, culture, institutional influence, peer influence, ethics and tax morale, as factors that may affect taxpayer compliance behaviour (Figure 3). This model is significant as it predicts that demographic variables indirectly influence tax compliance behaviour through their effects on non-compliance opportunities and attitudes.

Figure 3: Expanded Model of Taxpayer Compliance
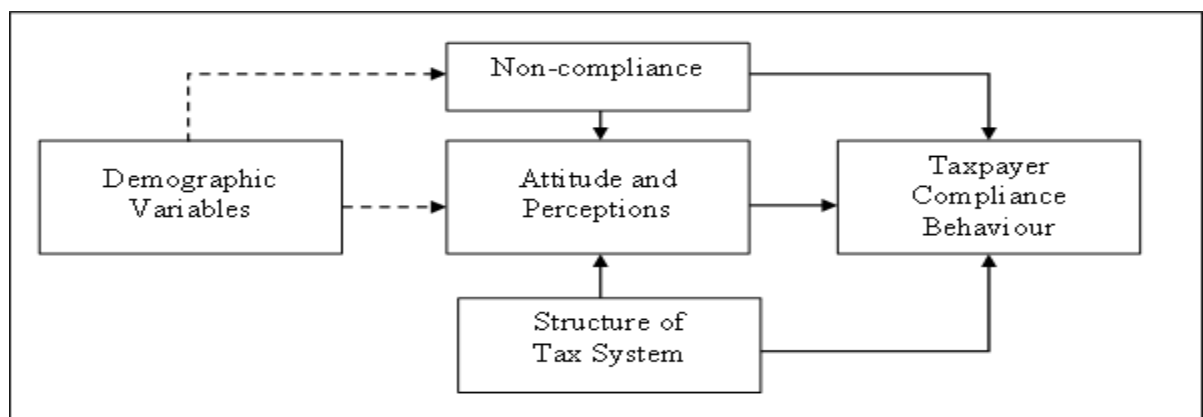
Source: Fischer et al. (1992)

Both the economic and behavioural approaches have contributed to the understanding of tax compliance behaviour. A study designed on a blend of both approaches seems most appropriate as a single approach is not likely to be totally effective in explaining the compliance behaviour of taxpayers Hasseldine and Bebbington (1991). In addition, examining taxpayer behaviour is complex and challenging as the relevant literature emanates from a variety of disciplines including economics, psychology, and sociology.

A review of the extensive literature on factors affecting individual tax compliance behaviour uncovered three main categories of determinants of such behaviour. These categories include demographic, economic and behavioural determinants (Richardson, 2006). Demographic determinants include age, gender, education and occupation, while economic determinants include income level, income source, tax rates and sanctions. Behavioural determinants include complexity, fairness, revenue authority contact, peer influence and ethics.

Despite any shortcomings, findings from prior studies have provided evidence of the factors affecting the reporting decisions of corporations. Rice38 found that profit performance influenced tax compliance but did not observe a relationship between firm size and tax compliance. Tax compliance was positively associated with public disclosure and negatively associated with the marginal tax rate. A study by Kamdar (1997) discovered that audit rates and profit performance had a positive and significant impact on tax compliance. No significant relationships were found between tax compliance and true income, marginal tax rates, probability of detection, penalties and other socio-economic factors. The author suggested that greater audit coverage could act as an effective deterrent to corporate non-compliance, resulting in a substantial rise in tax revenues.

Joulfaian (2000) ascertained that non-compliant corporations are more likely to be managed by executives who have failed to comply with their individual income tax obligations, and vice-versa. The author proposed future studies to include managerial preferences as one of the tax compliance determinants. Moreover, marginal tax rates, audit rate, firm size and income level were all found to influence non-compliance behaviour; foreign ownership was not. Another US study by Hanlon, Mills and Slemrod (2007) estimated corporate non-compliance to be 13% of the tax liability, as measured by deficiencies proposed upon audit investigation. The non-compliance rate for corporations, relative to their size, was U-shaped: larger companies were observed to be more non-compliant than their smaller counterparts, but medium-sized companies had the lowest non-compliance rate. According to the authors, the unexpected finding was connected with the opportunity for non-compliance. Concerning corporate characteristics, size, industry, multi-nationality, being publicly traded, the presence of intangible assets and executive compensation determined corporate compliance behaviour. Two other corporate characteristics, effective tax rates and the quality of governance, had no effect on the compliance behaviour of corporate taxpayers.

A review of the literature found that limited empirical research was utilised to evaluate the compliance behaviour of corporate taxpayers. The majority of tax compliance literature focused on the determinants of tax compliance behaviour of individual taxpayers. Findings from limited studies using the compliance data of large corporate taxpayers have provided some evidence of the determinants of the compliance behaviour of corporate taxpayers.

2.5 Prior Studies on determinants of tax compliance or non-compliance

The issue of intentional or unintentional noncompliance is relatively widespread and appears to have increased over the past forty years. Broadly, the factors that relate to small business tax non-compliance behaviour are put under three categories: tax and taxpayers' characteristics, business characteristics and demographics of the owner.

2.5.1   Tax and taxpayers' characteristics and tax non-compliance behaviour

There are various factors with respect to the taxpayer herself, the tax administration and the tax structure that play importantly into shaping the compliance or non-compliance behaviour. Generally, tax compliance costs, taxpayers' attitude and perceptions and the extent to which the taxpayer is knowledgeable about the general issues and specific tax laws influence compliance behaviour.

Tax compliance costs are those incurred by taxpayers due to their obligations to comply with a country's relevant tax laws. The term 'business tax compliance costs' refers to the value of resources expended by business taxpayers in complying with tax regulations (Tran-Nam, 2003). According to Abdul Jabbar (2009), tax compliance costs consist of internal costs (value of time spent by company staff on tax matters), external costs (fees paid to external tax professionals) and incidental costs (stationery items, computer, telephone and litigation costs). Some of the theoretical literature has suggested tax compliance costs as a possible determinant of tax compliance behaviour.

There are propositions in the literature suggesting that the compliance behaviour of taxpayers is also influenced by their attitudes and perceptions. The propositions are grouped into tax attitudinal aspect variables consisting of tax deterrence sanctions and tax law fairness.

The relationship between tax noncompliance and penalty rate mostly varies across studies due to differing views regarding the economic deterrence theory. Previous studies such as Allingham and Sandmo (1972) found a positive relationship between the penalty level and the reported income. In contrast, Kamdar (1997) failed to support Allingham and Sandmo (1972) findings. She did not find any statistical evidence to support that increased penalty rates would help to reduce tax noncompliance. According to Braithwaite (2009), he described deterrence as a double edged sword. Not only does deterrence enhance voluntary compliance because it points out what is the right thing to do, but it can also make taxpayers resist to comply with tax laws because of feelings of oppression.

Abdul-Jabbar (2009) examined the corporate tax non-compliance of SMEs using a survey approach. He adopted hypothetical tax scenarios in measuring tax compliance behaviour. Abdul-Jabbar (2009) concluded that tax complexity and the probability of a tax audit significantly influenced non-compliant behaviour, while tax level, compliance costs and perceived tax fairness did not.

Also within literature of tax compliance, the perception of the tax payers about the fairness of the tax system is recognized as an important factor that can have significant influence on tax compliance behaviour. According to Gilligan and Richardson (2005) and Alabede, Ariffin and Md Idris (2011), the tax system that is perceived as unfair by citizens may likely to be less successful and this will encourage the taxpayers to engage in noncompliance behaviour. Prior to this, Porcano (1984) indicated that taxpayers' needs and ability to pay are the important factors that determined the fairness of tax system.

Tax education enables to well understand the tax system. Eriksen and Fallan (1996) believed that with reasonable understanding of the tax laws, people are willing to respect the tax system, consequently they are more compliant to pay tax instead of evading it. Furthermore, individuals become educated, which is knowledgeable in the aspect of tax planning, tax law and the likes. At the same time, tax knowledge improves individual's awareness and ethics toward reducing their tendencies of tax non-compliance.

Moreover, the attitude and perception of individuals towards tax system may predict their tax compliance or non-compliance behaviour. In theory, Oskamp (1991) indicated that attitude is a partial indication of behaviour. Attitude towards an event, object, function or person may be favourable or unfavourable. According to Ajzen (1991), individual evaluates an event or object positively or negatively and positive and negative evaluation is the main dominant characteristic of an individual's attitude. In agreement with Ajzen (1991), Kircher, Muebacher, Kastlunger and Wahl (2007) suggested that taxpayer who has favourable attitude towards tax evasion is likely to be less compliant and equally, taxpayer with unfavourable attitude is likely to be more compliant. Eriksen and Fallan (1996) said that dimensions of attitude towards tax evasion include: attitude to one's own tax evasion which is referred to as tax ethics, fairness of tax system, attitude to other people's tax evasion and attitude to general crime.

Empirically, evidence suggests that ethical value of individuals may play significant role in the compliance decision of an individual taxpayer. In line with this, Ho and Wang (2008) submitted that individuals with stronger ethical mind may have favourable compliance attitude as they will regard complying with rule and regulation as an obligation that ought to be met. Chau and Leung (2009) equally asserted that ethical value may influence tax compliance decision of an individual taxpayer. The result of

Bobek and Hatfield (2003) confirmed that the ethical stance and beliefs of individuals are apparently the best means of consolidating and improving tax compliance behaviour.

2.5.2 Business characteristics and tax non-compliance behaviour

A review of past literature identifies some corporate characteristics as determinants of corporate taxpayer compliance decisions. Even though there are mixed results from the limited study of self-employed taxpayer compliance behaviour, the empirical findings identified some characteristics that influence taxpayer compliance levels (Abdul Jabbar, 2009). The results also highlighted that the significance of the relationship between the determinants and tax compliance behaviour should be confirmed through empirical work in other tax jurisdictions and/or the study of other types of taxpayers.

Various business characteristics have been studied in relation to the level of tax non-compliance/compliance. These include industry (business activity or sector), business size, age of the business and form of ownership (Sapiei et al. 2014).

Previous research provides different findings with regard to the types of business activity. This is because different industries or business activities may have different incentives to develop strategies to evade tax. For example, Rice (1992) and Tedds (2010) found that the service-oriented industry is more compliant than other industries. In contrast, Chan and Mo (2000) found that service-oriented industry is less compliant than the manufacturing industry. Meanwhile, Hanlon et al. (2007) found that manufacturing, trade, transportation, warehouse, education and healthcare were less compliant than other industries. Juahir, Norsiah and Norman (2010) found that the construction industry is associated with fraudulent financial reporting. At Suame Magazine Cluster, various economic activities are undertaken and so as well informed by the different non-compliance behavioural pattern exhibited by different industries, the study towed in

similar line by looking at the link between business activities and non-compliance behaviour.

Another business-related variable is firm size. There is mixed evidence of the findings between the business size and tax noncompliance. Some prior studies (e.g., Hanlon et al., 2007; Nur-tegin, 2008; Rice, 1992) found a positive association between company size and tax noncompliance. In contrast, such authors as Joulfaian (2000), and Tedds (2010) found that company size is negatively associated with tax noncompliance. They found that larger firms are more compliant with tax laws due to better internal control, proper accounting system and higher tax knowledge as compared to smaller firms.

Furthermore, the implementation of SAS demands honesty and voluntary compliance among taxpayers. To comply with tax laws, rules and regulations, many corporations incur costs, which is an additional cost to their tax liability. Hafizah and Mustafa (2008) argued that this additional cost known as compliance cost poses a heavy burden and financial pressure for SMEs. In fact, they also found that small enterprises have a higher percentage of tax compliance costs as compared to large enterprises. The higher tax compliance costs can influence the intention of SMEs to comply with tax laws, rules and regulations. Thus, this study believes that such difficulties facing small firms would influence their compliance behavior.

Abdul Jabbar (2009) found out in his study that business size, which matters for determining the causes of compliance (Sapiei et al, 2014), did not have any significant influence on tax non-compliance. His findings on the impact of business age, industry sector, tax rate and incentives on the compliance behaviour of corporate SMEs were inconclusive.

2.5.3 Demographics of the individual taxpayer and tax non-compliance behaviour

Many demographic factors have been set out in literature to influence tax compliance behaviour. At least such factors as age, ethnic group, gender, level of income, level of education, marital status, religion and financial conditions have been studied in terms of their link to non-compliance behaviour.

With respect to age, it is found out that the older a taxpayer is the higher the probability that s/he will not disobey the tax law (Slemrod, 1992 and Schuetz, 2000). Tittle (1980) observed that younger taxpayers were more risk-seeking, less sensitive to penalties and also reflected the social and psychological differences related to the period in which they were raised. However, Porcano (1988) found no such relationship.

Behavioural literature has provided evidence suggesting differences in the behaviour of male and female toward risk taking. Studies had indicated that female have proven to be more risk averse than male in decision making particularly in financial decision risk (Meier-Pesti and Penz, 2007) To be specific, Mason and Calvin (1984) investigated behaviour of 800 taxpayers to admit income tax noncompliance in Oregon and reported that more men admitted to one form of tax evasion than women. Similarly, Eicher, Thomas and Wendy (2002) who studied the individual perception about various crimes including cheating on tax return, observed that more women than men accepted that it is wrong to cheat on income tax returns. Torgler and Schneidier (2009) also found women to have high tax morale than men in Switzerland and Belgium. The study of Manaf, Hasseldina and Hodges (2005) also found that more women are tax compliant than men in Malaysia. However few authors like Kirchler and Maciejovsky (2001) reported that self-reported tax compliance of women is lower than that of men.

The effect of education on taxpayer compliance has also been noted. The effect of education on tax compliance is not clear. However, Kornhauser (2007) argued that through its role in the process of internalisation of social norm and inculcating higher moral reasoning in individuals, education has influence on tax compliance. But Groenland and van Veldhoven (1983) cautioned that people with a better understanding (education) of tax laws have the capacity to avoid taxes as a result less compliant. As with other demographic factors, the empirical evidence on the association between education and tax compliance is mixed and inconclusive. In a survey study of taxpayers in USA, Song and Yarbrough (1976) found that education level had influence on tax ethical behaviour of the taxpayers. The authors concluded that education level is positively related to tax ethic. In the result of the investigation of the relationship between demographic factors and attitude toward tax evasion using New Zealand higher education students, Birch et al. (2003) reported that the respondents with higher education background and taxation knowledge are least involved in understating taxable income. Kasipilllai, Aripin and Amran (2003) determined the influence of education on tax compliance among undergraduate students in Malaysia and found significant relationship between education and tax compliance

Crane and Nouraud (1990) found that individuals with a higher level of income tend to evade tax more. The study of Ritsema and Thomas (2003) showed that income levels positively related to the tax owed. Similarly, Manaf et al. (2005) found that middle-income taxpayers are more compliant.

Differences in culture may cause differences in behaviour of taxpayers of different race or cultural background. In line of this, Chan et al. (2000) declared that cultural differences have a direct effect on individual taxpayer's compliance behaviour. Other authors considered culture to be a powerful environmental factor having a great influence

taxpayer's compliance behaviour (Chau and Leung, 2009; Tsakumis, Curatola and Porcano, 2007).

Tax payment is regarded differently by different religious sects. While some religions support the payment of tax to finance any form of government expenditure, others deny the obligation of tax payment under certain circumstances, such as a government engaging in activities regarded as illegitimate (McGee, 2006). However, evidence in the study of Torgler (2006) showed that in a country where the attendance of religious worship places is high there is significant tax compliance.

The implication of moderating effect of individual financial condition on tax compliance and its determinants may be more obvious in the society where there is high family responsibility and poverty rate as the case in some developing countries including Ghana (Brett, Cron and Slocum, 1995). Therefore, financial condition of individual may have positive or negative effect on the relationship between his/her attitude and compliance behaviour. Bloomquist (2003) identified financial strain as one of the sources of taxpayer's stress and said that individual taxpayer with meagre financial resources may be tempted by his bad financial condition to be noncompliant where the expenses of his household are more than his income. In a cross national study, Stack and Kposowa (2006) reported financial dissatisfaction to be significant predictor of tax evasion.

Previous researches indicate that tax knowledge is very essential in order to increase level of tax compliance (Richardson, 2006; Kirchler, Hoelzl and Wahl, 2008). Hence, it is very important to have knowledgeable and competent taxpayers. Park & Hyun (2003), suggest that tax education is one of the effective tools to induce taxpayers to comply more. In other word, taxpayers are more willing to comply if they understand basic

concept of taxation. For example, the level of tax compliance in Japan is very high because of higher literacy level (Rani, 2005).

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter clearly outlines the plan of the entire research and methodology utilized in this study. As it has been mentioned in the earlier chapters, the study specifically sought to pick out how small-scaled businesses clustered at the Suame Magazine within the Kumasi Metropolis exhibit tax non-compliance or tax compliance behavior with respect to the applicable tax laws of Ghana, and find out those factors that account for non-compliance or compliance behavior

3.1 Research Design

A research design involves a plan, structure and strategy conceived in order to obtain answers to research questions and control variables. It helps to control the experimental, extraneous and error variables of a particular research problem being studied (Creswell, 2005). This study has restrictively adopted positivist paradigm to research, using quantitative methods. The paradigm depends on deductive reasoning, whether the researcher seeks and spews out knowledge based on observed facts. This paradigm choice falls strongly in line with most existing research in taxation (Abdul-Manaf 2004). The reseacher begin with a discussion of the research design. This study was completed by following a predominantly quantitative research design with a little bit of qualitative element. Therefore, the researcher prefers to refer to the approach as unbalanced mixed approach rather than a straightforward mixed research design. The rationale behind utilizing quantitative research approach comes from the fact that the focus of this study is to statistically analyze the factors that better help establish association between the dependent and independent variables. The researcher sought as much as possible to make

an accurate measurement to determine the tax compliance attitude and behavior based on business economic and demographic factors of the SMEs and their owners.

In order to meet the research objectives, the study used survey method, which is consistent with most social sciences research (Babbie, 1989). Babbie (1989) also argued that the key advantage this design has over alternatives such as experiments, analytical approaches, etc. is the feasibility of obtaining a wide range of standardized information from a large population, which is cost effective. Nonetheless, the design admissibly falters on side that it fails to yield in-depth information and knowledge, requires a lot of resources and may lack all important feature in social sciences research of realism (Kerlinger and Lee, 2000).

Regardless of the limitations survey research design carries, it is believed that at present it dominates all research methods used in tax compliance research (Abdul Jabbar, 2009). Clearly, four research strategies have been found in literature to have been employed in tax compliance studies (see Richard and Sawyer, 2001). These include surveys, experiments, analytical approaches and regression modelling. Up to 1985, the survey method was the most frequently used method in the tax compliance literature. Thereafter, the trend continued but with a slight increase in the experimental method. Nevertheless, the survey method remained a popular method among tax compliance researchers (Richard and Sawyer, 2001). It is still possibly the most popular method used in the tax compliance studies (Abdul Jabbar, 2009).

The methodological issues and the advances made in all four methods since 1985 have been fully discussed by Richardson and Sawyer (Richard and Sawyer, 2001). It suffices to say that all four methods remain utilized in tax research and are subject to measurement difficulties to some extent. The most alarming concerns the honesty and

validity of self-responses (Richard and Sawyer, 2001). Nevertheless, no empirical support is yet found to indicate that one method is superior in accuracy terms than the others (Richard and Sawyer, 2001).

Again it is important to emphasize that the few studies that have been carried out in Ghana have typically concentrated on scrutinizing the reasons for non-compliance or compliance of taxes from the taxpayers' point of view.

3.2 Profile of Suame Magazine

Suame Cluster, located in Kumasi, is also known as 'Suame Magazine' because the site once housed a military magazine. The term Suame Magazine' was coined when the cluster was established at former armories. In northern Ghana, similar groupings have also adopted the 'Magazine' term while in the south they are referred to as 'Kokompes'. Suame Magazine is nearly 1.8 km long and 0.3 km wide.

The site was created when the entrepreneurs were removed from Kumasi city centre in the 1950s and 1960s. Prior to this enterprises had started clustering at former armories in Kumasi as early as 1935. The key turning point was in the mid-1970s with the retreat of Ghana's formal economy and tight restrictions on the importation of new vehicles and parts (Dawson, 1988). This led to a down-turn for large enterprises which were capital-intensive and relied on imports; therefore, small enterprises filled the gap as they were able to improvise spare-parts that were previously imported. However, in the 1980s under the Economic Recovery Programme (ERP), the importation of spare parts and even whole vehicles resumed but the large enterprises did not regain their previous dominance.

The land where Suame cluster is located is zoned for administrative purposes but plots within the zones are not well demarcated, mainly due to the haphazard construction of

temporary workshops by 'squatter artisans'. For the purpose of spatial planning and administration of land, the 'magazines' in Kumasi (for example, Asafo, Ahinsan, Krofrom, Sofoline and Suame) were categorized into 21 zones, of which Suame Magazine covers zones 1-7,11-13 and 18-19. The inconsistency in numbering was due to the rapid emergence of other 'magazines' in Kumasi. The increasing population of Suame Magazine emphasizes the need for government and other stakeholders, intervention in the provision of new physical infrastructure (for example: telecommunications, electricity, water, access roads and health posts) and expansion of existing ones to support spillover from small workshops. In 1984, over 40,000 people were working in Suame (Powell, 1986); currently there are about 80,000 people (Obeng, 2000). Based on the surveys conducted in the 1980s by the TCC of the Kwame Nkrumah University of Science & Technology (KNUST), it was estimated that the labour force of Suame Magazine would grow at approximately 8% per annum in the 1990s. This exceeded the high average rate of 4.5% urban migration, by mostly the youth. Hypothetically, this means that many of these youth — who migrate for better learning opportunities and employment — are being absorbed into the MSEs.

Suame Magazine is dominated by micro and small enterprises (MSEs). On average the enterprises have 5 workers, but the relatively more sophisticated manufacturing workshops have 7-10 workers on average. The main activities can be categorized under manufacturing, vehicle repair, metalworking, and sale of engineering materials, sale of automobile spare-parts and sale of food. Communication centers are increasingly playing an important role in enhancing the activities of the clusters (Adeya, 2006).

Table 1: Delineates the product groupings and services in Suame cluster

MAJOR SECTORS	PRODUCT GROUP AND SERVICES
Manufacturing	Food processing equipment and farm implements; cook stoves; utensils and foundry products
Vehicle repair & maintenance	Engine overhauling; auto electrical works; vehicle interior upholstery; auto body straightening and spraying
Metal working	Metal fabrication and plant construction, angle irons, channel irons, bars and so on
Sale of engineering materials & accessories	Sheet metals, bars, iron rods, steel sections. Hand tools, fasteners, electric motors, pumps and so on
Sale of automobile spare parts	Second-hand engines and parts, car decorating materials and so on
Sale of food	From dusks to dawn; all types of food and drinks
Communication and business centres	Telephone and fax services, photocopying, computer typesetting, Internet and e-mail services, sale of mobile phone cards and videocassettes, barbering and sale of soft drinks

Source: Adeya, UNU-INTECH Field Survey, 2001

3.3 Population, sample and sample selection

The target population consists of all small-scaled business operators within the Suame Magazine business segment. The study sought information from the owners and/or managers of small businesses within the cluster. SMEs within Suame Magazine were found to be very much appropriate in testing for the compliance or non-compliance behavior because it is pretty certain that these operators are likely to earn income and undertake economic activities which is probably less heterogeneous (Waldman-Brown, Obeng and Adu-Gyamfi, undated).

It has been found out that there are about 12,000 small businesses scattered within the cluster even though Waldman-Brown et al. (undated) identified that about 100,000

technical artisans work in the cluster. The study considered the number of 12,000 small firms as the total population of this study but utilized 200 respondents for the survey. The sample seems to be insufficient when compared to what was used in previous related studies in Ghana such as Boampong (2015) who used 353 garage owners and 2 tax officials; Otieku (1988) who used a little over 300 and Armah-Attoh and Awal (2013) used 300 respondents. However, Hanlon, Mills and Slemrod (2005) asserted that at least 100 subjects are sufficient in tax related survey research while Ferman, Stuart, and Hoynman (1987) and Fisher (2004) indicated no sample is likely to be representative of the entire population. Response rates in tax related survey-based studies are often low; usually around 20% to 30%. If this were true at least 40 responses should turn in and this sits above the minimum requirement of 30 observations for ordinary least square regressions (see Abdul Jabbar, 2009).

The sample selection techniques used in concluding on the sample are the quota sampling and purposive sampling methods. With quota sampling technique, sample elements are selected to ensure that the sample represents certain characteristics, in this case the type of activity undertaken by the small businesses. With no information available as to the level of players belonging to each type of business stated in *Table 1*,Tthe researcher assume equal firm representation within each category. Hence, purposefully distributed the 200 questionnaires dividing them equally among business categories resulting in 30 questionnaire search to a category in order to attain even representation across the six business types (they are seven in the table but the last two are joined). The remaining twenty were distributed to other business activities than the six categories.

The study employed purposive sampling to pick three tax officials who were considered to be good repository of information in respect of the study area for the purpose of conducting the semi-structured interview.

3.4 Variables of interest

The dependent variable in this study is tax non-compliance or compliance. It is detected that a horrendous fraction of about 78% of businesses surveyed at the Suame Magazine had not registered with the Registrar Generals Department in 2010 (Alexander, Willcox and Adu-Gyamfi, 2010). The authors alleged that the main driving force for this statistics would be to avoid the payment of taxes (to local and/or central governments). Of course, it must be said that the Tax Identification Number (TIN) is required to be obtained in the process of registering the business. Moreover 83% of the businesses surveyed did not maintain accounting records.

Furthermore, players within the informal sector typically fail to comply with tax laws by usually under-reporting and/or over-claiming of deduction or expenses (Ofori, 2009) while Ayee (2007) asserted that the whole compliance of taxes also involves timely payment of the amounts of tax due and timely filing of tax returns.

Accordingly, five proxies were chosen to measure the non-compliance or compliance behavior of the research subjects which include:

a. Yet to register business or business already registered with the Registrar Generals Department (drawn from the argument above put forward by Alexander et al. 2010);

b. Under-reporting of income (Abdul, 2003; Abdul Jabbar, 2009);

c. Over-claiming of deductions/expenses (Abdul, 2003; Abdul Jabbar, 2009);

d. Over-due filing of tax returns with the Ghana Revenue Authority (Franzoni, 1999); and

e. Delay in the payment of the amounts due (Franzoni, 1999; Ayee, 2007)

A sixth measure that takes composite measure of the weights assigned to each of the measures (b to e) is also included. This enabled me to some extent overcome the inadequacies of each measure to fully measure non-compliance as done by Abdul Jabbar (2009).

Independent variables were all drawn from the relevant prior literature on related issues in Ghana and elsewhere especially Kenya, Nigeria, Uganda and Malaysia since many of the articles downloaded related to these countries and much more because all the countries mentioned are not as much more advanced in terms of economic activities as economies of the standards of the US, UK, Italy, Japan, etc. the study considered the peculiarity of Ghana's situation and more importantly, circumstances of the specific research. More specifically, three main independent variables are considered (tax characteristics, business characteristics and owner characteristics) which are expanded into six independent variables were considered and which are:

a. Perceived fairness and complexity of the Ghana's tax system

b. Deterrence or probability of detection

c. Compliance costs

d. Tax knowledge

e. Business characteristics

f. Owner characteristics (demographics)

The first four are the relevant tax characteristics studied in this research.

The research model is reduced to the figure below:
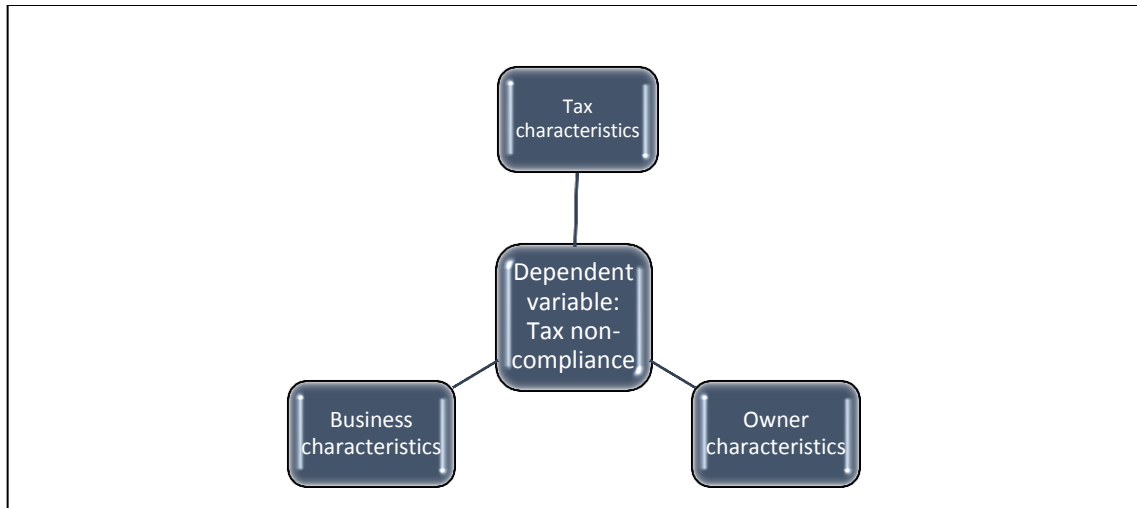
The above could be measured in diverse ways and often times it is said that measuring tax compliance behavior is extremely difficult and most challenging task in the field of taxation (Richard and Sawyer, 2001). Tax compliance literature largely points to three approaches in measuring non-compliance behavior of a taxpayer; namely, self-reports experiments and tax audits (Richard and Sawyer, 2001). Self-report and experimental methods are tax payer oriented, whereas tax auditing is return-oriented. Under the self-report method, taxpayers are asked to report their filing behavior, which could be asked directly (first person) and/or indirectly (third person). The experimental method requires taxpayers to make compliance decisions in an experimental setting. On the other hand, tax auditing relies on actual facts and data from the tax authorities that are available within and/or compiled through, audit activities.

Self-reporting is the most common method in tax research and is relatively easy, less costly, with less ethical issues and most importantly, perhaps the best available practical option (Elffers, Robben and Hessing, 2002). Despite some methodological limitations, for instance, some of distortion and social responsibility bias, self-reporting has been extensively used in measuring tax non-compliance. It is often operationalized either by

requiring responses to past evasion behaviours and/or hypothetical tax scenarios (Abdul Jabbar, 2009). Elffers, Robben and Hessing, (2002) assumed that the use of a scenario describing possible actions of a third party (indirect measure) can reduce the possible social responsibility bias. This resulted in the use of such third party scenario in this study but supplemented by direct questions as done in (Palil and Mustapha, 2011).

Moreover, self-reporting was employed because it was not feasible to obtain data on non-compliance behavior from the Ghana Revenue Authority as in the case of US where researchers have such available (see Hanlon, Mills and Slemrod, 2005).

It is suggested that the corporate behavior of SMEs is influenced by actions and preferences made by their executives (Hanlon, Mills and Slemrod, 2005). This study utilized the concept of managerial preferences as a proxy to measure corporate compliance behavior.

3.5 Data and data collection procedure

This study solely used primary data which were gathered through questionnaire administration and conduct of personal interview. The relative merits and demerits of these methods in social sciences are recognized (Babbie, 1989). Broadly, a personal interview is superior to the structured questionnaires administration, but is more expensive and time consuming. Hence, I needed to weigh up such relative strengths and weaknesses in making a decision. Finally, I resolved to combine the two methods in an attempt to triangulate my results.

The questionnaires, which were distributed to 200 small businesses within the Suame Magazine Cluster, contain three sets of questions spread under three sections (A, B and C). Section A contains general information that sought data on business characteristics and demographic information on the respondents (owners) themselves to address

research objective 3. Section B contains questions on the determinants of tax non-compliance (perception on fairness of the tax system, probability of detection (audit), compliant costs and tax knowledge) to address research objective 1. Section C contains questions that allowed me to measure the extent and form of tax non-compliance to address research objectives 1 and 2.

The questionnaires instrument used was tested for validity. According to Paton (2002), validity is the quality attributed to a proposition or a measure of the degree to which they conform to established knowledge or truth. An attitude scale is considered valid, for example, to the degree to which its results conform to other measures of possession of the attitude. Validity therefore refers to the extent to which an instrument can measure what it ought to measure. It therefore refers to the extent to which an instrument asks the right questions in terms of accuracy. Paton (2002) looked at validity as the accuracy and meaningfulness of inferences, based on research results. The content validity of the instrument was determined in two ways. First, the researcher discussed the items in the instrument (questionnaire) with supervisors, lecturers and colleagues from the School of Business. Since the determination of content validity is judgmental, all these people helped to refine the definition of the topic of concern, the items to be scaled and the scales to be used. Second, content validity of the instrument was substantiated through pilot testing the questions. The subjects for the piloting were 20 tax filers at Suame Magazine Small Taxpayers Office. The results from this test were checked against the research objectives; this led to minor refinements of the questions before the final questionnaire was produced.

Moreover, the reliability of the instrument had to be checked. Reliability is a measure of the extent to which a research instrument yields consistent results after repeated trials

(Creswell, 2005). Reliability of the test items in the questionnaire is proven when the Cronbach's alpha value exceeds 0.7.

Personal interviews were also held with three key informants (top tax officials including the head of the office) from the Suame Small Taxpayers Office (STO) who are believed to have field level experience with the small business taxpayers. the resolved to use semi-structured interview to enable me to go into the interview with pre-set questions drawn from literature and which the researcher firmly believed would allow me obtain a corroborative evidence to that gathered using the questionnaires.

3.6 Data analysis and presentation

Questionnaires received from respondents and interview schedules were checked for completeness with follow up calls to ensure the highest return rate was attained. Categorization and coding was done and data entered into Stata. Both quantitative and qualitative analyses were used.

Quantitatively, the data collected through questionnaires administration was described or summarized using descriptive statistics such as means and standard deviations which assisted in meaningfully describing the distribution of responses. Spearman's rank correlation matrix was used to know relationships between variables. The study used the rank correlation matrix instead of Pearson's matrix because of the binary and categorical nature of the variables used in this study.

In line with Torgler and Schneider (2009) and Gbadogo and Awunyo-Vitor (2015) and the fact that the dependent variables were binary and ordinal, a simple probit regression model was used to predict the probability of tax non-compliance among the small business owners using five independent variables: tax knowledge, compliance costs,

perception of fairness and complexity of the Ghana's tax system, probability of detection and business and owner characteristics. The regression model used to test is given below:

$$\text{Non-Compliance} = \alpha + \beta_1 \text{t\_know} + \beta_2 \text{c\_costs} + \beta_3 \text{d\_prob} + \beta_4 \text{p\_faircomp} + \Sigma \text{ Others} + \varepsilon$$

Where; Non-compliance refers to each of the six measures mentioned under Section 3.4

α — Constant

$B_1, \beta_2, \beta_3 \& \beta_4$ — Coefficients indicating rate of change of tax non-compliance as tax knowledge, compliance costs, probability of detection, and tax perceived fairness and complexity, change by 1 unit.

t_know — tax knowledge

c_costs — compliance costs

d_prob — probability of detection

p_faircomp — perceived fairness and complexity of the tax system

Others — owners' demographics (level of education and religion) and business characteristics (age of the business)

ε — the Stochastic error term

The study employed qualitative analysis to discuss the responses obtained from the semi-structured interviews that were carried out. The next is chapter four.

PRESENTATION AND ANALYSIS OF RESULTS

4.0 Introduction

The preceding chapter dealt with the step by step approach adopted in this study to provide answer to the research questions to enable me attempt to provide solution to the research problem raised fore to this research journey. In this very chapter, the study present and analyze the findings of the fieldwork undertaken in the course of the study. The researcher use descriptive statistics, correlation matrix and regression approach to analyze the collected data. The chapter also hosts the discussion of the findings analyzed. The chapter begins with analysis of the response rate obtained for the study.

4.1 Preliminary considerations

4.1.1   Response rate

As indicated in chapter three, a total of two-hundred questionnaires were distributed to and administered on the small business owners. From the Table 4.1 below, it can be observed that out of the total number of questionnaires more than a half is usable. This compares a lot more favorably with the results obtained by Abdul Jabbar's (2009) response rate in his study of Malaysian SMEs; he recorded a small response rate of around just 16%. Twenty of the 130 returned and answered questionnaires were discarded principally for such reasons as incompleteness of responses.

Table 4.1 Response rate of the questionnaires administered

	Number of questionnaires	Percentage
Usable	110	55.00
Returned but unusable	20	10.00
Not returned	70	35.00
Total	**200**	**100.00**

4.1.2   Profile of the respondents

This sub-section provides details about the respondents (who are the SME owners). The gender distribution is considered first.

4.1.2.1 Gender of the respondents

In this respect, the researcher sought to obtain knowledge of the sex type of the respondents.

Table 4. 1:Gender of the study participants

	Number of respondents	Percentage
Male	72	65.45
Female	38	34.55
Total	**110**	**100.00**

From the analysis of the table above Table 4.2, it can be clearly seen that the male respondents dominates their female counterparts. That is out of the usable 110 answered questionnaires, 65% who responded were males whiles the remaining 35% were females. This proves that the study is been gender bias but the non-probabilistic sampling method that was used, specifically purposive sampling method , generated a result that proves there are more male to female counterparts in the Suame Magazine needed for this particular study. This according to the study might be as a result of the artisanal and heavy duty nature of work carried out at the Suame Magazine. Despite the study been gender bias the data presented is authentic.

4.1.2.2 The educational level of the respondents

Over here, the researcher was interested in finding out the level of education attained by the respondents as at the time of participation.

Table 4. 2: Level of education

	Number of respondents	**Percentage**
Tertiary	31	28.18
Sec. /Voc.	29	26.36
Basic	32	29.09
None	18	16.36
Total	**110**	**100.00**

Table 4.3 sets outs the spread of the respondents with respect to the level of education attained by them. Impressively, the small business owners have appreciable level of education as only 16 or so percent of the total usable questionnaires have no formal educational at all. About 28% of the 110 owners possess at least higher national diplomas. The high level of education might suggest that respondents are more likely not be naïve about taxation matters and that, non-compliance is probably low among these SMEs.

4.1.2.3 Religious background of the respondents

Literature on tax compliance behaviour, morality and ethics affixes high level of moral values to religious individuals. That is, the religious person usually acts more morally and ethically right than the non-religious person. A person was considered religious once he/she indicated that he/she is a Christian, a Moslem or a traditionalist.

Table 4. 3: Religious background of the business owners

	Number of respondents	**Percentage**
Religious	101	91.82
Non-religious	9	8.18
Total	**110**	**100.00**

As shown in Table 4.4, 101 respondents, representing little less than 92%, out of the total number are religious. Hence, only 8% are not members of the Christianity religion, Islamic religion and Traditional religion.

4.1.2.4 The financial condition of the respondents

The researcher intended to find out the state of financial strength of the taxpayers as it is suggested that the more financially satisfied have less unwillingness to honour tax obligations.

Table 4. 4: Financial condition of the business owners

	Number of respondents	**Percentage**
Satisfied financially	30	27.27
Dissatisfied financially	80	72.73
Total	**110**	**100.00**

Out of the 110 respondents, more than 72% are living with financial dissatisfaction. This might reflect the anecdotal findings of the general hardships that many Ghanaians were experiencing at the time of the study.

4.1.2.5 Age of the respondents

By reckoning that the level of compliance often bears positive relationship with the length of life of the taxpayer, I obtained findings of the age groupings of the respondents. Table 4.6 gives the details of the age groups to which respondents belong. The table provides that almost all the respondents are within the working age class as only 7.27% are aged above 60 years.

Table 4. 5: Age of the business owners

	Number of respondents	Percentage
18-30years	22	20.00
31-40years	47	42.73
41-60years	33	30.00
More than 60 years	8	7.27
Total	**110**	**100.00**

4.1.3 Profile of the SMEs

4.1.3.1 Types of business activity

As earlier on indicated in the previous chapter that questionnaire distribution was made even among the specified groups as each group was supplied with 30 questionnaires and the unspecified group supplied with remaining 20.

Table 4. 6: Types of activity

	Number of respondents	Percentage
Production	12	10.91
Fitting	22	20.00
Welder and metal works	10	9.09
Condemned mat	17	15.45
Spare parts	25	22.73
Supporting services	13	11.82
Others	11	10.00
Total	**110**	**100.00**

Of the responded questionnaires, the ones answered by those dealing in spare parts occupy the largest fraction, 22.73%, while those by the welders and metal workers form the least of all the fractions. Since, no business activity obtains zero fraction and indeed the least being 9% the data are likely to reflect and represent the diversity of economic activities undertaken at the Suame Magazine.

4.1.3.2 Business age

The studyalso asked for the length of existence of businesses to obtain idea about the extent of experience these businesses have had with tax matters.

Table 4. 7: Business age

	Number of respondents	**Percentage**
Less than 2years	13	11.82
2-5years	39	35.45
More than 5years	58	52.73
Total	**110**	**100.00**

From Table 4.8 above, one can easily observe that little close to 90% of the respondents own businesses which are at least two years old. More importantly, more than half of the businesses have existed for more than 5 years; this indicates that the owners have had good experience level with tax issues.

4.1.3.3 The level of activity (turnover) of the SMEs

The researcher used the turnover range within which the SMEs fall to measure out both the level of business activities undertaken and the size of the firms. From the Table 4.9 below, it can be seen that most of the firms generate revenue up to GHS50,000 per annum on average over say last three years and handful earn turnover above GHS100,000. This suggests that many of the firms owned are small in size.

Table 4. 8: The level of turnover of the SMEs

|	**Number of respondents**	**Percentage**
GHS0-GHS10,000	49	44.55
GHS10,001-GHS50,000	39	35.45
GHS50,001-GHS100,000	14	12.73
GHS100,001-GHS500,000	4	3.64
Above GHS500,000	4	3.64
Total	**110**	**100.00**

4.2 Analyses from the tax payer's perspective

4.2.1 The form of tax non-compliance likely to be exhibited by the taxpayers

This section deals with presenting the forms of tax non-compliance that taxpayers at the Suame Magazine probably do exhibit. From Figure 4.1 below, the study graphically display the ratings given to each of the four (out of the five) measures by which I construe tax non-compliance in this study. That is, except for the measure that is based on whether the business activity is registered, all the measures which use the Five Likert Scale are put in context. Reading the graph rightwards, the first set of five bars is the summary of the responses given when respondents were asked to answer the question that relates to whether given the opportunity they would understate their taxable income (B). This form of tax non-compliance seems not favoured by taxpayers as the level of disagreement (strong and straight) with understating taxable income is so high.

Figure 4. 1: Forms of non-compliance behaviour (B, C, D and E)
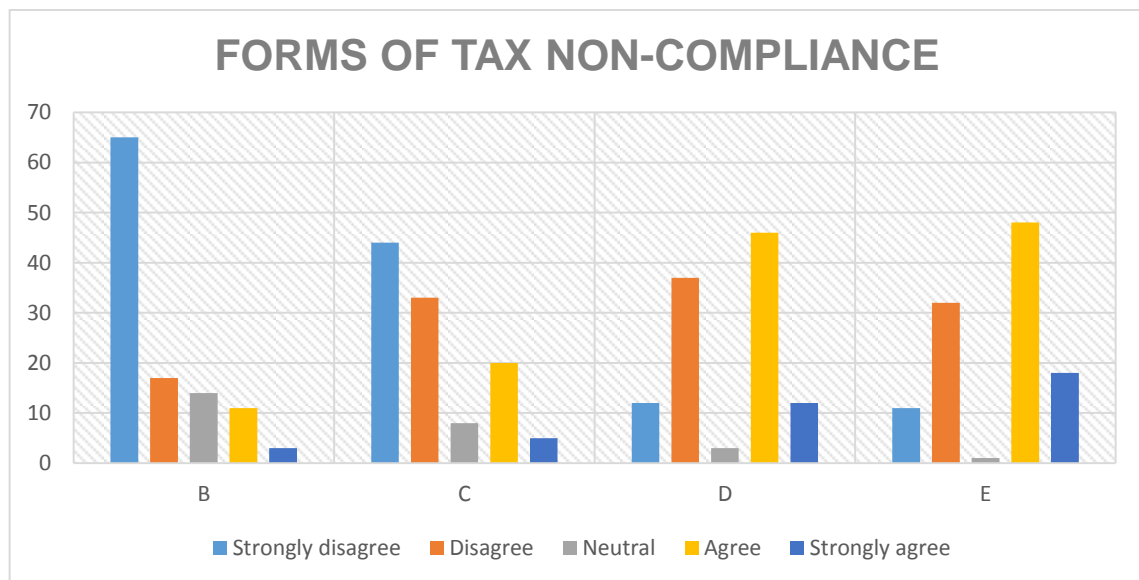
A look at the second set, the overstatement of expenditure (C), from the left hand side also produces results that indicate that taxpayers would not inflate deductions that the Tax Authorities give to taxpayers. The combined length of the first two bars (strongly disagree and disagree) indicate that the SME owners do not support the deflation of

taxable profit. Revealingly, many taxpayers would not use understatement of income or overstatement of expenditure to beat the tax laws.

However, the taxpayers do not see delay in returns filing (D) and overdue tax debt (E) as harmful beliefs within the tax law parlance. Both third and fourth sets of tall bars indicate that taxpayers warmly agree and strongly agree that tax returns submitted late and tax debts settled off the debt period are not tax law breaches. However, these two acts are offences which are punishable under the relevant tax laws of Ghana.

The researcher also display Figure 4.2 to show the level of non-registration of businesses among the firms.

Figure 4. 2: Level of business registration
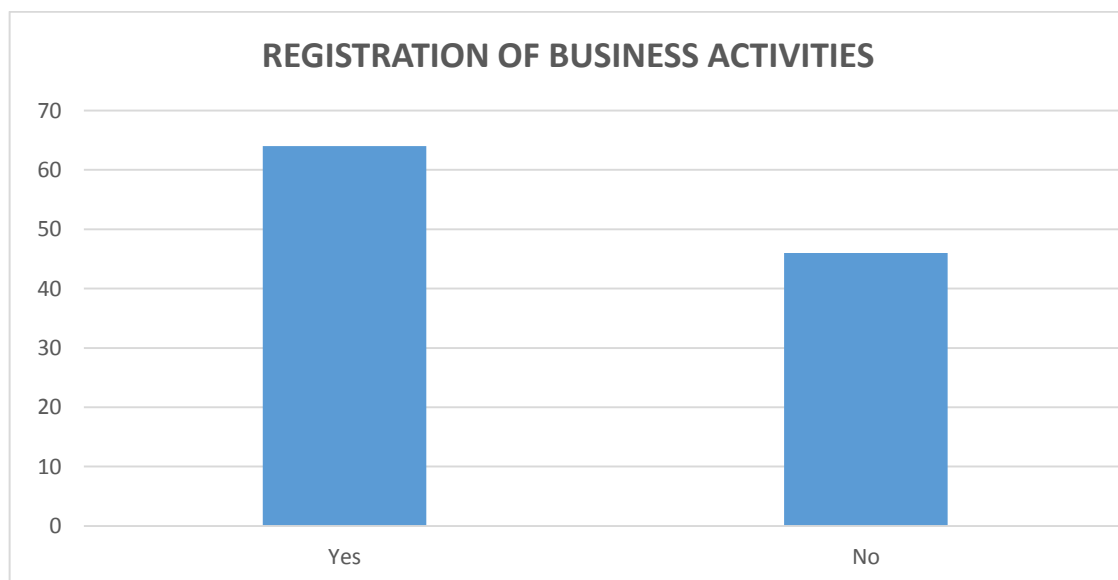
From the figure above, it can be read that some good number of businesses owned by the respondents do not have records with the Registrar of Companies Department even though those which are registered a more than those not registered. The researcher found that close to 50 owners out of the total 110 operate outside the formal sector and are likely to have dodged tax payments.

In conclusion, the forms of tax non-compliance are likely to be failure to file returns and failure to honour tax debts on due dates rather adjusting the taxable profits themselves. The central and local governments are also likely to lose tax revenue due to high level of unregistered businesses.

In discussing the findings, it has been said that many Suame Magazine based SME tax payers are more likely not to file their tax returns within time and also not pay their due to the state before or on due dates than to under-declare their incomes and over state their lawful deductions. This seems to be inconsistent with prior findings such ones obtained by Abdul-Jabbar (2009) from Malaysian context that tax payers use income under-reporting and overstatement of expenses to "disrespect" the tax laws. This result might suggest that taxpayer's view the latter two as perhaps too immoral tax noncompliance approaches to be engaged compared to not meeting deadlines, a finding that confirms the anecdotal evidence of disrespect for time in Ghana. Of course, the low noncompliance disposition lends support to the findings by Armah-Attoh and Awal (2013) who found that Ghanaians' attitude towards taxation is generally not worrying.

4.2.2 Determinants of tax non-compliance from the tax payer's perspective

To achieve this objective, the study applies regression models linking behavioural factors to six different non-compliance measures. The main analysis was conducted using binary and ordered probit multivariate model estimations for the "A" dependent variable (binary variable because it takes just Yes/No response) and the other five dependent variables (ordinal variables because they were measured on a Five Likert Scale ordering responses from strongly disagree to strongly agree) and the discussion of the chronology is as follows.

Before proceeding on to conduct the probability based analysis, I conduct descriptive statistical analysis and Spearman correlation analysis.

4.2.2.1 Descriptive statistics

Consistent with the earlier discussion, Table 4.10 below shows that average rankings for both understatement of income and overstatement of expenditure are closer to zero than to the maximum non-compliance score of 5. They show mean scores of 1.86 and 2.15 respectively. Both measures of failure to meet deadline for filing tax returns and that for settling tax liabilities record means of above 3 which indicates more non-compliance. The overall non-compliance score exceeds average of 10 against the maximum of 18 score. Thus, the non-compliance is more likely than not among the SMEs consistent with the findings of Sapiei et al. (2014).

Regarding the key predictor variables which include probability of detection, compliance costs, tax knowledge and perceived fairness and complexity of the tax system, the following are noted based on the summary statistics.

Table 4. 9: Descriptive statistics relating to the six dependent variables (A, B, C, D, E and F) and all the predictor variables prior to correlation matrix

Variables	Observation	Mean	Standard dev	Min	Max
A	110	0.4181818	0.4955179	0	1
B	110	1.863636	1.161123	1	5
C	110	2.154545	1.257538	1	5
D	110	3.063636	1.265471	1	5
E	110	3.309091	1.304512	1	5
F	110	10.39091	2.602382	4	18
Gender	110	0.6545455	0.4776925	0	1
Educ.	110	1.663636	1.060355	0	3
Rel.	110	0.0818182	0.2753419	0	1
Age	110	2.236364	0.8451402	1	4
f._cond	110	0.7272727	0.4474001	0	1
b_age	110	2.409091	0.6946117	1	3
turn	110	1.809091	0.9720446	1	5
d_prob	110	5.609091	1.681499	3	10
c_costs	110	3.590909	1.329244	1	5
t_know	110	4.1	1.602464	2	10
p_faircomp	110	23.77273	4.44881	12	35

The following are the explanations of the outcome **(dependent) variables**. A = Failure to register business, which is binary variable that was given a value of 1 if the respondent indicated that the business is not registered and 0 otherwise; B = Under-reporting of income, which is a ordinal variable that was given values ranging from 1 to 5 where 1 suggested "strongly disagree" with the hypothetical person's desire to under-report taxable income in the questionnaire scenario and 5 "strongly agree" ; C = Overstatement of expenditure, which is a ordinal variable that was given values ranging from 1 to 5 where 1 suggested "strongly disagree" with the hypothetical person's desire to over-state expenditure in the questionnaire scenario and 5 "strongly agree"; D = Failure to meet deadline for filing tax returns, which is a ordinal variable that was given values ranging from 1 to 5 where 1 suggested "strongly disagree" with filing tax returns late and 5 "strongly agree"; E = Failure to make tax payment on due dates, which is a ordinal variable that was given values ranging from 1 to 5 where 1 suggested "strongly disagree"

with the need to make tax payments on due dates and 5 "strongly agree"; and F = Combined measure of non-compliance using the rankings of B to E. **Predictor variables** were measured as follows: t_know = tax knowledge level measured by assigning values of 1 to 10 in an ascending order that ranges from much knowledge to little knowledge; c_costs = compliance costs which was measured by assigning values ranging from 1 to 5 in an ascending order of low perceived costs to high perceived costs;p_faircomp = level of perceived fairness and complexity of the tax system which was measured by assigning values ranging from 1 to 35 in an ascending order that begins from high perceived fairness and complexity to low perceived fairness and complexity; d_prob = the detection probability which was measured by assigning values ranging from 1 to 10 in an ascending order that begins from high probability to low probability of detection; b_age = the age of the business which was measured by assigning values that range from 1 to 3 with the lowest weight assigned to young shops that less than two years old and the highest to those older than five years; rel = religion which was measured by assigning a value of 1 if the respondent was a Christian, Moslem or traditionalist and 0 otherwise; and educ = level of education which was measured by assigning weights of 0 to 3 in an ascending order starting from no education to having tertiary education.

With respect to detection probability, the study sought to find out how taxpayers rank the effectiveness of the tools available to detect non-compliance should it happen. The maximum of 10 score was assigned to this measure; the higher the lower the probability that non-compliance would be detected. The average score of 5.6 suggest that more respondents see detection less probable if non-compliance sails through. The measure, tax compliance costs, was considered to determine whether taxpayers deem compliance costly or not. The higher the value the more costly taxpayers consider compliance to be. With an average score of close to 4 given a maximum score of 5, the taxpayers see the

costs of complying with tax laws to be costly business activity. The next measure is tax knowledge. Higher score suggests lower knowledge level; thus, with an average score of less than half the maximum score of 10 it is expected than more taxpayers possess adequate knowledge to understand tax matters. This seems consistent with the results obtained for the level of education of the respondents discussed earlier on. The last measure is the perceived fairness and complexity of tax system. For this, higher score suggests perceived less fair or more complex tax system. It does seem that respondents consider the tax system to be unfair and complex given the high average score as against the maximum score of 35.

It can also be observed that the degree of variability among the responses is high enough to allow for a more robust statistical analysis. The next section provides the results of the Spearman correlation matrix.

4.2.2.2 Correlation analysis

The researcher chose Spearman correlation matrix instead of a more common Pearson matrix owing to the binary and ordinal nature of the responses obtained for the questions. The Pearson matrix works only when the variables considered for correlation are both continuous in nature. The study present the matrix as follows:

Table 4.11: Spearman Correlation Matrix

	A	B	C	D	E	F	Gender	educ	rel	age	f_cond	b_age	turn	d_prob	c_costs	t_know	p_faircomp
A	1.0000																
B	0.0335	1.0000															
C	0.1296	0.0842	1.0000														
D	-0.3249	0.2007	0.0838	1.0000													
E	0.0999	-0.0952	-0.1076	-0.0202	1.0000												
F	-0.0614	0.4829	0.5078	0.6259	0.3661	1.0000											
gender	0.0345	-0.1670	0.0247	-0.1116	0.0013	-0.0689	1.0000										
educ	-0.1989	-0.0979	-0.0944	0.1210	-0.1152	-0.0487	-0.1554	1.0000									
rel	0.1504	0.2625	0.1491	0.1403	0.0660	0.2491	0.1471	-0.3341	1.0000								
age	-0.0525	0.0905	0.1558	-0.0514	-0.0107	0.0953	0.0419	-0.4369	0.1305	1.0000							
f_cond	0.1053	-0.0695	0.0681	-0.0713	-0.1366	-0.0531	0.0273	-0.0553	0.0339	0.0038	1.0000						
b_age	0.0766	0.0211	-0.0247	-0.1687	0.1229	-0.0217	0.1575	-0.2825	-0.0140	0.3984	0.0690	1.0000					
turn	-0.1435	-0.1431	-0.1328	0.1433	0.0251	-0.0145	0.0583	0.1545	0.0853	-0.0872	-0.1151	0.1335	1.0000				
d_prob	-0.1098	0.1488	0.1672	0.1978	0.1277	0.3527	0.0911	0.0825	0.0522	0.0051	-0.0518	-0.1695	-0.0222	1.0000			
c_costs	0.1482	-0.1650	0.0893	-0.1306	0.2190	-0.0143	0.3078	-0.1432	0.0969	0.0756	-0.0236	0.1858	-0.2023	-0.0556	1.0000		
t_know	0.1701	0.1780	0.0110	-0.1712	-0.0766	-0.0821	-0.2491	0.0169	-0.0377	-0.0560	-0.0322	-0.0897	-0.0981	-0.0714	-0.0687	1.0000	
p_faircomp	0.1869	-0.0565	-0.0813	-0.3178	0.3344	-0.1038	0.2767	-0.3866	0.0897	0.1325	-0.0762	0.2520	-0.0972	0.0343	0.3944	0.0393	1.0000

Definition of variables is the same as what is found under Table 4.10

From the matrix, the first six variables both vertically and laterally are the various dependent variables (being the forms of non-compliance) and the rest being the predictor variables (determinants of non-compliance). Demographic characteristics of the respondents are the next five variables after the six, the next two after the five being the business demographics. Observing the coefficients of the matrix between the dependent and predictor variables reveal that, the level of education has the highest association with failure to register. The association measure is -0.1989 which indicates the more educated a tax payer is the more inverse association it has with failure to register, thus, unregistered businesses are more to belong to the less educated. Another observations are that larger firms are also more likely to register due to the negative coefficient against turnover and that if the business owners deem detection probability high (low) do not register (do register). The one with the least correlation is the gender of the respondents; it has a relationship of 0.0345.

On the understatement of income, religion bears the strongest association with the dependent variable among the predictor variables. Income is likely to be understated by tax payers who are not religious as the probability of understatement of income increases by 0.2625 when a tax payer moves from non-religious category to religious category. Financial condition of the taxpayer seems unimportant to explain the probability of income understatement.

On overstatement of expenditure probability, the most important variable is detection probability. They positively correlate which indicate that the lower the detection probability the higher the likelihood of overstatement. With the lowest correlation coefficient of 0.0110, low tax knowledge bears the lowest association.

Regarding the failure to meet deadline in returns filing, perceived fairness and complexity of tax systems is identified to have the strongest association. There is an inverse relationship which suggests that the less perceived fairness and complexity the less the tax payer agrees to the failure to meet deadline. The age of the respondent is the least important variable in this respect.

The next dependent variable the researcher consider is the failure to pay tax liability on time. With this, again the perceived fairness and complexity of the tax system carries the strongest association. The correlation is positive with a coefficient of 0.3344. This means that for every increase or decrease in the ranking of perceived fairness and complexity the likelihood not to pay on time should increase or decreases by about 33%. Thus, if perceived fairness and complexity is high it should result in more non-compliance (higher ratings for failure to pay on time) and how surprising this result is. Gender in this case is the most passive variable on its own to bear any association.

The last dependent variable is the combined score of all the measures but the failure to register variable. In relation to the variable, religion once more has become the most associating variable. It bears a positive correlation with the combined measure indicating that the presumed morally decadent (the unreligious) shows more likelihood of holistically breaching the tax law. This thinking is in line with Palil, Akir and Ahmad (2013).

Another issue to deal with the matrix results is to check for multicollinearity among the predictor variables. A rule of thumb measure of 0.8 is used to set the ceiling value above which multicollinearity is said to exist (see Abdul Jabbar, 2009). None of the correlations among the predictor variables exceeds this threshold, hence, no serious multicollinearity exists in the model. The highest correlation coefficient is -0.4367 which between age of

the respondents and educational level suggesting that the younger owners are more associated with higher level of education. This is far less than the multicollinearity threshold.

The last thing to consider is to establish which demographic and business characteristics bear more association with the six dependent variables for inclusion in the regression analyses. This is necessary since any attempt made to include all the variables will adversely the degree of freedom required to afford the production of more valid results (Park and Hyun, 2004). To ensure that the total predictor variables number does not exceed seven and that both demographical variables and business characteristics are included, I chose two demographical variables (religion and education) and one business characteristics (business age) based on the strength of their correlation coefficients with the dependent variables. These three variables were then added to the four primary predictor variables for this study. The next section presents the results of the probit regressions run to determine the determinants of tax non-compliance from the tax payers' perspective.

4.2.2.3 Results of probit regressions (multivariate analysis)

The researcher chose the probit regression analysis for this study due to the binary and ordinal nature of my dependent variables. The study intended to establish the relationship between the determinants and the probability of non-compliance (rather than strict non-compliance this requires actual cases of non-compliance such proven cases from the examination of the taxpayers' records). The study employed binary probit regression on the "failure to register" measure since the response to this was simple Yes/No while the researcher did ordinal (ordered) probit regression on the other five since they were determined on Five Likert Scale. The results of these regressions are in the table below.

Table 4. 12: Multivariate analysis

	(Model 1)	(Model 2)	(Model 3)	(Model 4)	(Model 5)	(Model 6)
	A	B	C	D	E	F
t_know	0.178**	0.148**	0.0126	-0.0923	-0.0519	-0.0135
	(2.18)	(2.10)	(0.19)	(-1.39)	(-0.79)	(-0.22)
	[0.06257]	[-0.052**]	[-0.004]	[0.015]	[0.008]	[0.000]
c_costs	0.107	-0.151*	0.128	-0.0151	0.140*	0.0383
	(1.05)	(-1.65)	(1.47)	(-0.18)	(1.65)	(0.48)
	[0.03764]	[-0.050*]	[-0.047]	[0.002]	[-0.021]	[-0.001]
d_prob	-0.0611	0.143**	0.148**	0.0988	0.0700	0.224***
	(-0.79)	(2.07)	(2.28)	(1.54)	(1.07)	(3.60)
	[-0.02701]	[0.0002]	[-0.055**]	[-0.016]	[-0.011]	[0.006]
p_faircomp	0.0333	0.00103	-0.0511*	-0.0767***	0.0690**	-0.0428
	(0.98)	(0.03)	(-1.81)	(-2.70)	(2.45)	(-1.64)
	[0.01170]	[-0.376]	[0.019*]	[0.013]	[-0.011**]	[0.001]
b_age	-0.00291	0.102	0.0213	-0.196	0.0551	0.0286
	(-0.01)	(0.59)	(0.13)	(-1.22)	(0.34)	(0.19)
	[-0.00102]	[-0.036]	[-0.008]	[0.033]	[-0.008]	[-0.001]
Rel.	0.486	1.071***	0.336	0.719*	0.121	1.083***
	(0.95)	(2.64)	(0.84)	(1.74)	(0.30)	(2.76)
	[.17069]	[-0.38***]	[-0.123]	[-0.120]	[-0.018]	[-0.031]
Educ.	-0.137	-0.0915	-0.124	0.0338	0.0477	-0.0834
	(-0.98)	(-0.72)	(-1.07)	(0.29)	(0.41)	(-0.77)
	[-0.04826]	[0.032]	[0.046]	[-0.006]	[-0.007]	[0.002]
r2	0.2921	0.8700	0.0331	0.711	0.61	0.475
p	0.0554	0.00366	0.188	0.00422	0.0158	0.00112

t statistics in ( ) while marginal effects in [] * p<0.1, ** p<0.05, *** p<0.01

Table above presents the results of the binary probit model and ordinal (ordered) probit model estimations of the determinants of tax non-compliance via six different measures of non-compliance behaviour among owners of small enterprises at the Suame Magazine within the Kumasi Metropolis. In line with the analytical approaches adopted in the studies carried out by Torgler and Schneider (2009), Yew, Milanov and McGee (2014) and Gbadago and Awunyo-Vitor (2015), the researcher rather based the interpretation of the results found by these estimations on the marginal (incremental) effects with conventional Stata assumption of averaging across the entire sample than on the magnitude of the coefficients of the predictor variables. However, in line with Yew et al. (2014), the researcher regarded the signs attached to the coefficients of the predictor

variables in interpreting the results instead of those attached to the marginal effects as shown in the table. The study paid much more attention to the statistically significant variables.

From the table, it could be read that the all explanatory powers (pseudo R^2) of the six models are reasonable high except for Models 1 and 3. These two models also do not have significant joint effects of the predictor variables as both have overall p-values higher than 5% significant level. For this reason, the researcher did pay any more attention to the results of these models as they lack reasonable level of goodness-of-fit. For all the findings reported and interpreted below, they are so interpreted under the assumption that all other predictor variables are held constant.

So specifically, starting with Model 2, the researcher found by this model that all the predictor variables, but the level of perceived fairness and complexity of the Ghana's tax system for SMEs, age of the respondents and the length of business life, have statistically significant associations with the likelihood of a business owner under-reporting his or her business income for tax purposes. In particular, the level of tax knowledge possessed, the perceived level of compliance costs, perceived detection probability and the religious affiliation of the respondents have average marginal effects of -0.052 at 5% significant level, -0.050 at 5% significant level, 0.0002 at 10% significant level and -0.38 at 1% significant level respectively. This means that given an extra one unit decrease in the level of tax knowledge possessed (note that the higher the value assigned to the tax knowledge variable the lower the tax knowledge) the probability of tax non-compliance through under-declaring income occurring decreases by 5.2% implying that those with less tax knowledge tend to comply more. For the perceived level of compliance, more weight assigned implies that respondents perceived compliance as costly activity and because of this the marginal effect of -0.050 indicates that as the perception of

compliance costs increases by one additional unit the probability of under-reporting reducing is 5%, contrary to expectation once again as one would have expected that higher compliance costs should lead less compliance. Furthermore, one unit decrease (which means one additional increase in weight assigned because the higher weights suggest perception of lower detection probability) in the level of perception of detection probability results in about 0.02% increase in the probability of tax payers not complying, consistent with expectation that higher detection measures yield lower noncompliance rate and vice versa. The marginal effect of -0.38 for religion is explained as the probability of tax noncompliance declining by 38% if the respondent moves from non-religious category to the religious and this observation is at 99% confidence level.

In respect to Model 4, I found that the perception of fairness and complexity in the tax system and religion have statistically significant association with the likelihood of noncompliance. They respectively have marginal effects of 0.013 at 1% significant level and -0.120 at 10% significant level. This suggests that while the probability of tax non-compliance through failure to meet deadline for filing tax returns stands to increase by 1.3% by every one extra rise in the perception of low level of fairness and high complexity the same probability declines by 12% if a tax payer attaches him/herself to a church, moslem community or shrine.

Just as in Model 4, Model 5 yielded only two significant predictor variables. Whereas the level of perceived compliance costs showed a marginal effect of -0.021 at 10% significant level the perception of fairness and complexity of the tax system produced a marginal effect of -0.011 at 5% significant level. This indicates that the probability of not meeting the due dates for making payments to the Ghana Revenue Authorities reduces by 1.2% as the tax payer perceives compliance to cost more, a finding which contradicts expectations. The relationship between noncompliance and the level of perceived

fairness and complexity of the tax system is also out of line with expectation because the findings indicate that once the perception of low level of fairness and high level of complexity goes up by one extra unit the probability of noncompliance comes down by 1.1%.

Finally, Model 6 also produced two statistically significant predictor variables. The researcher found by summing up the weights assigned to each case (observation or respondent) to the most previous four measures of noncompliance into a combined outcome variable (in fact, it is for this reason that all the four measures were measured with same connotation that the higher value assigned suggests higher non-compliance or low compliance) the perception of fairness and complexity and religion had significant marginal effects of 0.006 and -0.031 respectively. The meaning is of the two effects is that as the weight of perception of fairness and complexity increases (that is, lower level of fairness and higher level of complexity) the rate of non-compliance probably increases by 0.6% while the rate of noncompliance is likely to reduce by 3.1% as a respondent is categorized under the religious instead of non-religious.

In summary, the researcher gathered findings on factors that are likely to enhance the chances of tax noncompliance among SMEs at Suame Magazine. From the models and the above paragraphs, it can be observed that each of all the seven predictor variables is at related to at least a dependent variable except for age of the business and the educational level attained meaning that having a business that has existed for long or short and the level of education a tax payer has attained matter not in explaining non-compliance.

4.2.2.4 Discussion of findings

Clearly, the level of tax knowledge possessed did not explain much the tax

noncompliance situation at the Suame Magazine as it is only related to the possibility of under-declaration of income. More so, general level of education did not matter in explaining noncompliance. This looks quite worrying given that many empirical studies have found statistically significant relationship between tax knowledge level and compliance rates. It is even much more so if the study consider that low level of tax knowledge actually caused the probability of not complying to decrease. For example, my findings sharply contrast with those of Gbadago and Awunyo-Vitor (2015) who reported that the level of tax knowledge bears significant negative relationship with non-compliance of Gift Tax laws of Ghana. They disagree with the findings of some advanced country studies such the ones by Richardson (2006) who found inverse relationship between tax evasion and level of education, Park and Hyun (2008) who suggested that tax education helps induce increased compliance level and Kirchler et al. (2008); however my findings provide to findings reported by Loo and Ho (2005) that level of education did separate those who were not to likely comply and those likely to. This is perhaps due to the fact that the more knowledgeable a tax payer turns into regarding the tax laws, the better the person is able to identify loopholes within the system rather being more and better disposed to understand the essence of being taxed.

The more tax payers see compliance costs to be high the less they seem not to be non-compliant. This finding did not lend support to the expectation that high compliant costs should discourage people from not complying with tax rules.

The researcher again observed that the more tax payers view the tax system as unfair and unduly complex the more tax noncompliance through failure to pay tax on time is probably not likely to occur (the more compliant they become). This is true with failure to meet deadline but not with failure to pay tax due on time. This inconsistency in results is not the first of its kind as Abdul Jabbar (2009) reported the same picture. Of course,

tax non-compliance should probably rise if tax payers hold the perception that the tax system is unfair and lacks equity across dimensions. Accordingly, the findings that non-compliance through failure to settle tax liability on time is related to the perception of fairness and complexity had been found before in such studies as Barjoyai (1987), Allingham and Sandmo (1972) and McKerchar (2002) who all found evidence relating toinverse link between taxpayers' viewpoint about fairness and the level of non-compliance.

Finally and more importantly, both religiosity and probability of detection were found to bear the expected relationship with the extent of non-compliance. It was observed that religion has inverse relationship with the probability of the level of non-compliance occurring. This buys into the notion that religiosity usually influences persons to have higher regard for moral and ethical values which ultimately contribute to reducing the level of non-compliance (Anderson and Tollison, 1992; Torgler, 2006; Torgler and Schneider, 2006). The level of detection probability was also found to inversely relate with the level of non-compliance such that as the tax payer expresses opinion that non-compliance is easily detectable the more poised he/she is likely to comply or fail not to comply. This finding is consistent with that found by Abdul Jabbar (2009) and Palil (2010).

4.3 Analyses from the tax administrator's perspective

Understandably, obtaining results from the tax administrator as a way of augmenting those obtained from the tax payer him/herself helps to gain a far richer insight into the reasons why non-compliance does or does not occur. Two hypothetical questions were posed in the Interview guide used to carry out the semi-structured interviews with the three officials of the Suame STO.

The first of the questions read as:

"What do you professionally and technically suggest as reason(s) for her (the hypothetical taxpayer) unwillingness to be law abiding" by declaring zero turnover.

To this question, many answers turned in. All the three officials shared a common opinion that tax payers' hesitation to respect tax rules stems from the payer's lack of understanding of the fact that tax payment is a statutory obligation. This position, in fact, confirmed not the findings from the tax payer's perspective as the regressions results clearly yielded that the level of education and specific tax knowledge do nothing more than being neutral when explaining non-compliance probability. However, tax knowledge had been found by many previous researchers such as Armah-Attoh and Awal (2013), Palil (2010) and Richardson (2006) as an important factor that affects non-compliance behaviour. Again, they unanimously indicated that the apathy that no direct benefits result from the monies paid to the state in the form of taxes also accounts for the reluctance of the tax payer to follow the tax laws. In particular one interviewee pointed out that the unwillingness may arise because *"...she does not benefit directly from the payment of taxes"*. This point subsumes into the perception of fairness factor that was tested for in the models. Thus, the tax administrators reasoned that lack of fairness could be an explanation for low compliance (high non-compliance). This partly agreed with the model results and goes to lend support to previous empirical findings that perception of fairness and equity influences the tax payer's compliance demeanor (e.g. Porcano, 1984; Gilligan and Richardson, 2005; Palil, 2010). Two out of the three concurred that tax morale could also play a part by indicating that tax payer just refuses to pay taxes because he/she merely wants to evade or avoid taxes to test the laws.

The second question posed read as:

"What do you also think are the reasons why some taxpayers from the Suame Zone readily accept or not refuse to pay taxes and other levies to the government?"

One response provided that ran through is the fear of being mopped up by the police if the tax payer refuses to pay. One officer categorically stated that "the fear of prosecution also prevents others from avoiding or evading taxes". This confirmed that the threat of punishment induces compliance. In detailing out the factors that caused taxpayers to honor their tax obligations, Palil (2010) identified that the rate of penalty reduces the possibility of non-compliance. However, some other points raised include matters such as the need for tax clearance to transact businesses and appreciation of civic responsibility as defined in the social contract concept that the payment of taxes is the responsibility and obligation of every responsible citizen. These factors highlight the incentive-based motivators for compliance.

On the whole, the tax administrator perceived that more has to be done if tax laws were to be upheld.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

The just ended chapter presented and discussed the results that the responses to the research questions posed earlier on in this report. In this main, the researcher present the summary of the findings obtained, the conclusion of this report and the recommendation for policy promulgations, refinements and withdrawals. It also suggests further studies that are the directions the researcher believes would be needed to overcome the limitations the researcher points out in the study. To begin with, the summary of the study findings takes the next section.

5.1 Summary of findings

It is important that the researcher remind you of the three research objectives that the study sought to achieve in pursuing the study's main aim of determining the forms and extent of tax non-compliance or compliance among SMEs at the Suame Magazine and why they do or do not comply. The first was to find out what forms of tax noncompliance are exhibited by the SMEs. The second was to the find out what influences tax payers not to comply with the tax laws from tax payer's perspective. The third and final was to find out from the tax administrator's viewpoint why tax payers do or do not comply with tax regulations. The following is the summary of the findings gathered.

Regarding the first objective, It was found that the tax payers are likely not to comply with tax provisions that relate to submitting tax returns on time for due assessment to be raised on the tax payer and to making sure that the tax amount due from the tax payers is appropriately settled on time. The researhcer found that tax payers are likely not to

under-declare their taxable incomes or over state their allowable deductions. Emphatically, most respondents disagree normally or strongly with the situations of reporting lower income levels and taking higher deductions given the opportunity whereas most either strongly agree or agree with that it is not wrong to both file returns late and pay the tax due after deadlines.

Regarding the second, I detected that the factors most likely to cause non-compliance are religiosity and detection probability. The non-religious small business owners at the Magazine have the highest probability of not complying with tax laws. Again, if the tax payer perceives that his or her non-compliance behaviour is detectible through tax audits or assessments then the probability of the person failing to comply is low. The findings indicated that such factors as being either a male or female, being educated or not, being highly literate or not, being young or old, sales level of the small businesses being higher or lower and the business having being in existence for long or short, do not offer any insight in explaining the factors that cause tax payers at Suame Magazine not to comply with tax rules.

Regarding the third and the final objective, it was found that tax administrators hold the view that small tax payers are likely not to comply for reasons such as the taxpayer's lack of knowledge and understanding of the constitutionally supported activity of taxing and the fact that the tax payer sees the tax system as unfair on account of not experiencing any direct benefits for respecting tax laws. On reasons why compliance is likely anticipatable the researcher found that tax administrators think the fear of prosecution, realization of tax payment as being a civic responsibility and the benefits of obtaining tax clearance certificates influence tax payers to abide by tax rules. The researcher turn next to the conclusion.

5.2 Conclusions of findings

Primarily, this study was carried out with the aim of understanding the reasons why the SMEs at the Suame Magazine are likely to comply or not to comply with tax laws of Ghana.

The essence of this study is owed to the fact that the growing patterns of small businesses and the informal sector has yet not resulted in commensurate contributions made by these businesses to the state in respect of tax payments. The lack of this understanding meaningfully culminated into this journey of research that sought to conduct a study that fills a research gap by using probit models on diverse measures of tax non-compliance in a single study in Ghana's context unlike Boampong (2015) who used only one measure when he conducted a similar study using the same research setting, Suame Magazine. Through multi-faceted dimension, the research findings contribute to existing literature by connecting findings of non-compliance determinants from the perspectives of the tax payer and the tax administrator which hardly to come by in compliance related studies. Moreover, the study utilized both quantitative and qualitative analyses to bring to light what factors are likely to influence non-compliance in an SME niche.

The key findings obtained highlight that the small business tax payer is likely not to comply with submitting tax returns on time and paying his/her tax liability on due dates. Moreover, from the tax payer's end, non-compliance is more likely if the tax payer is non-religious and if he/she perceives the non-compliance detection structures such as tax audits and tax assessments to be weak. From the tax administrator's viewpoint, tax non-compliance is likely if the tax payer sees no direct benefits and if he lacks the understanding of his or her responsibility to pay taxes.

5.3 Recommendations

The researcher outline the following recommendations based on the findings obtained in this study. The recommendations are split between what are required for policy fixing and consolidation and what are required for further studies.

For policy considerations, the study first submit that the Ghana Revenue Authority makes pact with and enter into valid partnership with the police and the judiciary to ensure that non-compliance behaviour is punished with fines and/or sentences to pose threat to other fellows who may try to flout the tax laws. This is considered appropriate given that the experienced tax officers have intimated that non-compliance looks unlike if the fear of prosecution is imminent.

Second, the Ghana Revenue Authority are advised again to recruit more tax auditors and tax assessors who have the requisite investigation skills to help detect and deter non-compliance. How appropriate it would be if more of the staff members of the Authority held qualifications and membership with bodies such as the Institute of Chartered Accountants, Ghana, the Association of Certified Chartered Accountant, the Chartered Institute of Taxation, among others, such that the members would be auditing inclined.

The style of education in schools and religious organizations should be designed to have strong elements of instilling moral and ethical values in their students and members. High moral values seem to have a strong bearing through religiosity on the tax payer's willingness to follow the tax laws. Apparently, given the significant level of the association it looks not inappropriate for the tax bodies to encourage religious leaders to continue to encourage their members of the need to become holistically right by standing to accord the state with its due.

Finally, a policies such as increasing the incentives that tax payers obtain for comply against not comply such as the benefits of accessing tax clearance certificates should be widened up to include many others such as organizing area based awards for tax payers who demonstrate non-evading conduct. Such practice may help to encourage the tax payers to readily comply with tax requirements. On the flip side, those in custody and control of the tax monies are strongly advised to live by example and respectfully communicate the essence of this whole tax activity to the citizenry by using the monies faithfully for the benefit of all.

For further studies purpose, the researcher first recommend that much more entrenched study is carried out by extending the sample to include many other SMEs to help ensure external validity of the findings. Further study can also be carried out by adopting other research methodologies such as obtaining actual non-compliance data (rather than using questionnaires to infer non-compliance) through examinations of tax payer records even though this approach may have higher ethical concerns. However, if appropriate authority is sought and gained the findings of such study might well be a better reflection of the non-compliance behaviour given the fact that any survey based study has many inherent limitations such as biases in response (see Abdul Jabbar, 2009). Finally, this study could be replicated using other settings such as large corporations, pay-as-you-earn (PAYE), Gift tax, Capital Gains Tax, etc. since income taxes are generally low in Ghana.

REFERENCES

1. Abdul-Jabbar, H. (2009),"Income tax non-compliance of small and medium enterprises in Malaysia: Determinants and tax compliance costs."(Unpublished PhD thesis, Curtin University of Technology, Perth, Australia).

2. Alexander, R., Willcox, M. and Adu-Gyamfi, Y. (2010),"Cluster Development in Suame Magazine." In Proc. 3rd Continental Conference of the Pan-African Competitiveness Forum. Elmina, Ghana.

3. Allingham M.G. and Sandmo A. (1972), "Income tax evasion: A theoretical analysis." Journal of Public Economics pp. 323-338.

4. Alm, J. (1991), "A perspective on the experimental analysis of taxpayer reporting" Accounting Review vol. 66(3) pp. 577.

5. Alm, J., Jackson, B. and McKee, M. (1992), "Institutional uncertainty and taxpayer compliance". American Economic Review, vol. 82(4), pp.1018-1026.

6. Andreoni, J., Erard, B. and Feinstein, J. (1998), "Tax compliance". Journal of Economic Literature, vol. 36, pp. 818-860.

7. Armah-Attoh, D. and Awal, M. (2013), "Tax administration in Ghana: Perceived Institutional Challenges."Afrobarometer Briefing Paper No. 124.

8. Ayee, J. (2007), "Building tax compliance through with government". Paper presented at the Foreign Investment Service. Alisa Hotel, Accra.

9. Babbie, E. (1989), "The Practice of Social Research." 5th edn, Wadsworth Publishing Company, Belmont: CA.

10. Becker, F. and Gary, S. (1968), "Crime and Punishment: An Economic Approach. Journal of Political Economy, vol. 78, pp. 169-217.

11. Birch A, Peters, P. and Sawyer, A. (2003), "New Zealanders Attitudes to Tax Evasion: A Demographic Analysis" New Zealand Journal of Taxation law and Policy vol. 9, 65-109.

12. Bloomquist, K.M. (2003), "Income inequality and tax evasion: A synthesis." Tax Notes Int., vol. 31(4) pp. 347-367.

13. Boampong, S.O. (2015), "Factors affecting payment of income taxes by artisanal firms in Kumasi." Proceedings of the Third Conference on Advances in Economics, Management and Society Study.

14. Braithwaite, V. (2009), "Defiance in taxation and governance: Resisting and dismissing authority in a democracy." Cheltenham, UK: Edward Elgar.

15. Brett J.F., Cron W.L. and Slocum Jr, J.W. (1995),"Economic dependency on work: A moderator of the relationship between organizational commitment and performance." Academic Management Journal,vol. 38(1)pp. 261-271.

16. Chan, C. W., Troutman, C. S. and O'Bryan, D. (2000), "An expanded model of taxpayer compliance: Empirical evidence from USA and Hong Kong". Journal of International Accounting, Auditing and Taxation, vol. 9(2) pp. 83-103.

17. Chan, H. K. and Mo, P. L. L. (2000), "Tax holidays and tax noncompliance: An empirical study of corporate tax audits in China's developing country." The Accounting Review, vol. 75(4), pp. 469-484.

18. Chau, G. and Leung, P. (2009), "A critical review of Fischer's tax compliance model: A research synthesis". Journal of Accounting and Taxation, vol. 1(2), pp. 34-40.

19. Creswell, H. (2005), "Research methods for the social scientist." 4th edition, Prentice Hall.

20. Dominik, E. and Schneider F. (2008), "Increasing Shadow Economies all over the World-Fiction or Reality? A Survey of Global Evidence of their Size and of their Impact from 1970 to 1995, the Institute for the Study of Labour." Discussion Paper 26, Bonn, Germany, pp.26.

21. Eicher, J.D., Thomas, J.S, and Wendy, L.S. (2002), "Men, women, taxes and Ethics". Tax Notes,pp. 401-406.

22. Elffers, H., Weigel, R.H. and Hessing, D.J. (1992), "The Consequences of Different Strategies for Measuring Tax Evasion Behaviour." Journal of Economic Psychology,vol. 8(3) pp. 318– 319.

23. Feige, E. L.(1994), "The Underground Economy and the Currency Enigma", Supplement to Public Finance, Cambridge University Press p. 119.

24. Ferman L. A., Stuart H., and Hoynman M. (1987),"Issues and Prospects for the Study of Informal Economies: Concepts, Research Strategies and Policy."Annals of the America Academy of Political and Social Science, vol. 493, p. 161.

25. Fischer, C., Wartick M. and Mark M. (1992), "Detection Probability and Taxpayer Compliance: A Review of the Literature" Journal of Accounting Literature vol.11 no.1.

26. Franzoni, L. (2000), "Tax evasion and tax compliance". In Bouckaert, B. and DeGeest, G Encyclopedia of Law and Economics. Cheltenham: Edward Elgar.

27. Gilligan, G. and Richardson, G. (2005),"Perceptions of tax fairness and tax compliance in Australia and Hong Kong – a preliminary study." Journal of Financial Crime, vol. 12(4), pp. 331-43.

28. Government of Ghana (GoG) (2012) GRA Exceeds Revenue Target for Last Year,

http://www.ghana.gov.gh/index.php/news/general-news/10330-gra-exceeds-revenue targetfor-last-year

29. Groenland, E. A. and van Veldhoven, G. M. (1983), "Tax evasion behaviour: A psychological framework". Journal of Economic Psychology, vol. 3(2), pp. 129-144.

30. Hafizah, A. M., and Mustafa, M. H. (2008),"Tax compliance costs of Bumiputera small and medium enterprises in Northern Malaysia." International Journal of Management Studies, vol. 15(1), pp. 21-42.

31. Hanlon, M., Mills, L. and Slemrod, J. (2007), "An empirical examination of corporate tax non-compliance". (pp. 171-210) Cambridge: Cambridge University Press.

32. Hart, J. K. (1970), "Small-scaled Entrepreneurs in Ghana and Development Planning." The Journal of Development Studies Vol. 6 (4) pp.104.

33. Hasseldine J. and Bebbington K.J. (1991), "Blending economic deterrence and fiscal psychology models in the design of responses to tax evasion: the New Zealand experience" Journal of Economic Psychology vol.12 (2) pp. 20.

34. James, S., and Alley, C. (2004), "Tax Compliance, self-assessment and tax administration."
Journal of Finance and Management in Public Services, vol. 2(2), pp. 27-42.

35. Joulfaian, D. (2000), "Corporate income tax evasion and managerial preferences". The Review of Economics and Statistics, vol. 82(4), pp. 698-701.

36. Juahir, M. N., Norsiah, A. and Norman, M. S. (2010), "Fraudulent financial reporting and company characteristics": Tax audit evidence. Journal of Financial Reporting and Accounting, vol. 8(2), pp. 1985-2517.

37. Kamdar, N. (1997), "Corporate income tax compliance: A time series analysis". Atlantic Economic Journal, vol. 25(1), pp. 37-49.

38. Kasipillai, J., and Jabbar, H. A. (2006), "Gender and ethnicity differences in tax compliance". Asian Academy of Management Journal, vol. 11(2), pp. 73-88.

39. Kasipillai, J., Aripin, N. and Amran, N.A. (2003),"The influence of education on tax avoidance and tax evasion." eJournal of tax Research, vol. 1(2), pp. 134–46.

40. Kirchler, E. (2007),"The Economic Psychology of Tax Behaviour". Cambridge: Cambridge University Press.

41. Kirchler, E., Hoelzl, E. and Wahl, I. (2008), "Enforced versus voluntary tax compliance: the 'slippery slope' framework. Journal of Economic Psychology vol. 29, pp. 210-225.

42. Kirchler, E., and Maciejovsky, B. (2001),"Tax compliance within the context of gain and loss situation, expected and current asset position and profession." Journal of Economic Psychology, vol. 22, pp. 173-194.

43. Kircher, E., Muebacher, S., Kastlunger, B. and Wahl, I. (2007), "Why pay taxes? A review of tax compliance decisions". Working paper, Georgia State University, Atlanta.

44. Kornhauser, M. E. (2007), "Normative and cognitive aspects of tax compliance: Literature review and recommendations for IRS regarding individual taxpayers". Florida Tax Review, vol.8(6), pp.601-634.

45. Long, S.B. and Swingen, J.A.(1991), 'Taxpayer Compliance: Setting New Agendas for Research." Law and Society Review, vol. 25(3), pp. 637-84.

46. Manaf, N. A., Hasseldine, J. and Hodges, R. (2005),"The determinants of Malaysian Land taxpayers' compliance attitude." eJournal of Tax Research, vol.3(2), pp 206-221.

47. Mason, R. and Calvin, L. D. (1984),"A study of admitted income tax evasion." Law and Society Review, 13(fall), 73-89.

48. McGee, R.W. (2006), "The ethic of tax evasion: A survey of international business academic". 60th International Atlantic Economic Conference. New York.

49. Meier-Pesti, K. and Penz, E. (2008),"Sex or gender? Expanding the sex-based view by introducing masculinity and femininity as predictors of financial risk taking." Journal of Economic Psychology. Vol.29, pp 180-196.

50. McKerchar, M. (2002), "The effects of complexity on unintentional noncompliance for personal taxpayers in Australia". Australian Tax Forum. Vol.17 (1), pp. 3-26.

51. Nur-tegin, K. D. (2008), "Determinants of Business Tax Compliance". [Article]. B.E. Journal of Economic Analysis & Policy: Topics in Economic Analysis & Policy, vol.8(1), pp. 1-26.

52. Ofori, E.G. (2009), "Taxation of the informal sector in Ghana" A critical examination". An Unpublished Master's Dissertation, Kwame Nkrumah University of Science and Technology.

53. Ohemeng, F.L.K. and Owusu, F. (2013), "Implementing a Revenue Authority Model of Tax Administration in Ghana: An Organizational Learning Perspective". The American Review of Public Administration.

54. Palil, M. R., and Mustapha, A. F. (2011), "Determinants of Tax Compliance in Asia: A case of Malaysia." European Journal of Social Sciences vol. 24 (1).

55. Palil, M. R., MdAkir, M. R. and Wan Ahmad, W. F. (2013), "The Perception of Tax Payers on Tax Knowledge and Tax Education with Level of Tax compliance: A Study of the Influences of Religiousity" ASEAN Journal of Economics, Management and Accounting vol. 1(1), pp. 118 – 129.

56. Park, C.G. and Hyun, J.K. (2003), "Examining the determinants of tax compliance by experimental data: A case of Korea." Journal of Policy Modeling vol. 25, pp. 673-684.

57. Paton, S. (2002), 'The Economics of Tax Compliance: What Do We Know and Where Do We Go?" Journal of Accounting Literature, vol. 13, pp. 81-116.

58. Rani, J. S. (2005), "SAS for Individuals: Preparing for effective management of tax matters." PricewaterhouseCoopers International Limited.

59. Rice, E. M. (1992), "The corporate tax gap: Evidence on tax compliance by small corporations: Ann Arbor." MI: University of Michigan Press.

60. Richardson, G. (2006), "Determinants of Tax Evasion: A Cross Country Investigation." Journal of International Accounting, Auditing and Taxation vol. 15, pp. 150-169.

61. Richardson, M. and Sawyer, A. (2001), "A Taxonomy of the Tax Compliance Literature: Further Findings, Problems and Prospects." Australian Tax Forum, vol. 16, pp. 137-320.

62. Ritsema, C. M. and Thomas, D. W. (2003), "Economic and behavioural determinants of tax compliance: Evidence from the 1997 Arkana's tax penalty amnesty program." IRS Research Conference. New York: IRS.

63. Roth, J.A., Scholz, J.T. and Witte, A.D. (1989),"Taxpayer Compliance: An Agenda for Research." Philadelphia: University of Pennsylvania Press.

64. Sapiei, N., Kasipillai, J. and Eze, U.C. (2014), "Determinants of tax compliance behavior of corporate taxpayers in Malaysia" eJournal of Tax Research vol.12 (2) pp. 383-409.

65. Schuetze, H.J. (2000), "Profiles of tax noncompliance among the self-employed in Canada: 1969 – 1992."Labour Economics, vol.7 (5), pp. 507-544.

66. Slemrod, J. (1992), "Why People Pay Taxes: Tax Compliance and Enforcement". University of Michigan Press.

67. Smith, P. (1994), "Assessing the Size of the Underground Economy: The Canadian Statistical Perspectives." Canadian Economic Observer, Cat. No.11-010.

68. Song, Y. and Yarbrough, T. (1978), "Tax ethics and taxpayer attitudes: A survey". Public Administration Review, vol. 38(5), pp. 442-452.

69. Stack S., and Kposowa, A. (2006), "The effect of religiosity on tax fraud acceptability: A cross- national analysis." Journal of Science Study Religionvol. 45(3) pp. 325-351.

70. Tedds, L. M. (2010), "Keeping it off the books: An empirical investigation of firms that engage in tax evasion" Applied Economics, vol. 42(19), pp. 2459-2473.

71. Tittle, C. R. (1980), "Sanctions and social deviance: The question of deterrence". New York: Praeger.

72. Torgler, B. (2006), "The importance of faith: Tax morale and religiosity". Journal of Economic Behaviour and Organization, vol.61, pp. 81-109.

73. Torgler, B. and Schneider, F. (2006), "What shapes attitudes toward paying taxes? Evidence from multicultural European Countries". Discussion Paper No. 2117, May 2006.

74. Torgler, B. and Schneider, F. (2009), "The impact of tax morale and institutional quality on the economy". Journal of Economy Psychology, vol. 30, pp. 228-245.

75. Tran-Nam, B.(2003),"Tax compliance research: An economic perspective".New Zealand Journal of Taxation Law and Policy vol. 9(4) pp 455-468.

76. Tsakumis, G. T., Curtola, A. P., and Porcano, T. M. (2007), "The relation between national cultural dimensions and tax evasion". Journal of International of Accounting, Auditing and Taxation, vol. 16, pp. 131-147.

77. Waldman-Brown, A., Obeng, G.Y. and Adu-Gyamfi, Y. (undated), "Innovation and stagnation among Ghana's technical artisans"

78. World Bank (2002), "Tax compliance in the informal sector: a focus on Ghana"

APPENDIX 1: QUESTIONNAIRE

SURVEY OF THE TAX COMPLIANCE/NON-COMPLIANCE OF THE INFORMAL SECTOR: A CASE OF SMALL BUSINESSES WITHIN SUAME MAGAZINE CLUSTER

<u>NOTE:</u> All responses will be kept strictly confidential and anonymous

SECTION A: GENERAL INFORMATION ON SMES AND THEIR OWNERS (OBJ. 3)

(Please tick the one appropriate to you)

1. Gender   Male [ ]   Female [ ]

2. Educational level Tertiary [ ] Secondary/Vocational [ ] Basic [ ] None [ ]

3. Religion   Christianity [ ]   Moslem [ ]   Traditional [ ]   others [ ]

4. Age   18-30 yrs. [ ]   31-40 yrs. [ ]   41-60 yrs. [ ]   More than 60 yrs. [ ]

5. Are you financially satisfied or dissatisfied considering your present conditions?

    Satisfied [ ]   Dissatisfied [ ]

6. The main business activity(ies) of your garage or shop is/are:

    (Please tick as many as applicable)

    Production of cook stoves, utensils and farm tools [ ]

    Auto-spraying, auto electrical works or general fitting works [ ]

    Welder and metal work [ ]

Sale of "condemned materials" and other metallic objects ▭

Spare parts dealership ▭

Sale of food or sale of communication and internet services ▭

Others, please specify ▭

7. The period your garage/shop/business has been in operation is

(Please tick one box)

Less than 2 years ▭   2 to 5 years ▭   More than 5 years ▭

8. The turnover of your garage/shop/business for 2014 falls within the range of:

GHS0 – GHS10,000 ▭

GHS10,001 – GHS50,000 ▭

GHS50,001 – GHS100,000 ▭

GHS100,001 – GHS500,000 ▭

Above GHS500,000 ▭

SECTION B: REASONS FOR TAX COMPLIANCE OR NON-COMPLIANCE

(OBJ. 4)

9. Kindly complete the following statements to indicate your opinion (by way of a tick on a five Likert-scale). There are no right or wrong answers. All responses are absolutely anonymous. Tick one box for each statement.

Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Personally I consider tax returns preparations complex	☐	☐	☐	☐	☐
Complying with the tax laws is relatively simple	☐	☐	☐	☐	☐
Compared to large businesses, more favourable tax treatments should be given to those in the small-scaled businesses	☐	☐	☐	☐	☐
The chances of tax audit (desk or field audit) are so low that it is worthwhile trying to cut corners a little on taxes I pay	☐	☐	☐	☐	☐
Serious enforcement and penalty by GRA result if one does not comply with the tax laws	☐	☐	☐	☐	☐
The relationship with the Tax Authorities has improved since the creation of small taxpayers offices in Ghana Revenue Authority	☐	☐	☐	☐	☐
The costs of complying with the tax laws such as maintaining records, filing returns, employing accounts officers, etc. are too high	☐	☐	☐	☐	☐
Government is doing less with the tax revenues it collects	☐	☐	☐	☐	☐
If other businesses and individuals fail to pay taxes and nothing happens then I see no reason why I should	☐	☐	☐	☐	☐
Officials who collect various taxes, fines, licenses, fees, tolls, etc. from taxpayers are corrupt	☐	☐	☐	☐	☐
Tax knowledge					
I know that I should obtain tax identification number for my business	☐	☐	☐	☐	☐
It is a civic duty to pay taxes to government	☐	☐	☐	☐	☐

SECTION C: EXTENT AND FORMS OF TAX NON-COMPLIANCE BEHAVIOUR (OBJ. 1 AND 2)

10. Read the following and kindly indicate your opinion (by way of a tick) to the following scenario based on your experience:

> Mr. A, a self-employed businessman is considering not including a cash sale of GHS10,000 as his business income in his 2014 tax return. Legally, the cash receipts of GHS10,000 should be included as a business income. However, he is almost certain that the tax authority will not audit him and would not know if the almost is not reported.

Taking into account all known and likely business circumstances to what extent do you agree with Mr. A's possible action of not reporting the cash sale of GHS10,000 as his business income?

	1	2	3	4	5	
Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree

11. Read the following and kindly indicate your opinion (by way of a tick) to the following scenario based on your experience:

> Mr. A, a self-employed businessman had incurred GHS10,000 to fix the roofing of his residential home which got ripped off during a torrential rainfall. In preparing his 2014 tax return, he is thinking about claiming the costs of the roofing as if the building was used for business purpose. Legally, such a claim is not allowable, but he is almost certain that he will not be audited and that the authorities will catch him out.

Taking into account all known and likely business circumstances to what extent do you agree with Mr. A's possible action of claiming GHS10,000 as his business deduction?

1   2   3   4   5

Strongly Disagree ☐ ☐ ☐ ☐ ☐ Strongly Agree

12. Have you registered your business or shop or garage with the Registrar General's Department?

Yes ☐   No ☐

13. Submitting your tax returns is more important thing even if the deadline for submission is not met.

1   2   3   4   5

Strongly Disagree ☐ ☐ ☐ ☐ ☐ Strongly Agree

14. Delay in the payment of taxes should not be an issue once the ultimate tax liability is settled.

1   2   3   4   5

Strongly Disagree ☐ ☐ ☐ ☐ ☐ Strongly Agree

15. Please state if you have any other comments and/or suggestions regarding taxation on businesses operating in the informal sector?

THANK YOU.

This interview guide is to solicit information from tax officials at the Suame Small Taxpayers' Office on the subject below:

STUDY ON TAX COMPLIANCE OR NON-COMPLIANCE BEHAVIOUR IN THE INFORMAL SECTOR: FOCUSING ON SMALL-BUSINESS OPERATORS AT SUAME MAGAZINE CLUSTER

Please be assured that any information obtained shall be handled with confidentiality and anonymity

Please pass comments on the following two questions after the scenario:

Mrs. B, a taxpayer whose files are with the Suame STO, has declared zero turnover for the just ended basis period meanwhile you saw her open her auto spare parts shop at Suame Magazine almost every week during the basis in question.

a. What do you professionally and technically suggest as reason(s) for her unwillingness to be tax law abiding.

b. What do you also think are the reasons why some taxpayers from the same zone readily accept not to refuse to pay taxes and other levies to the government