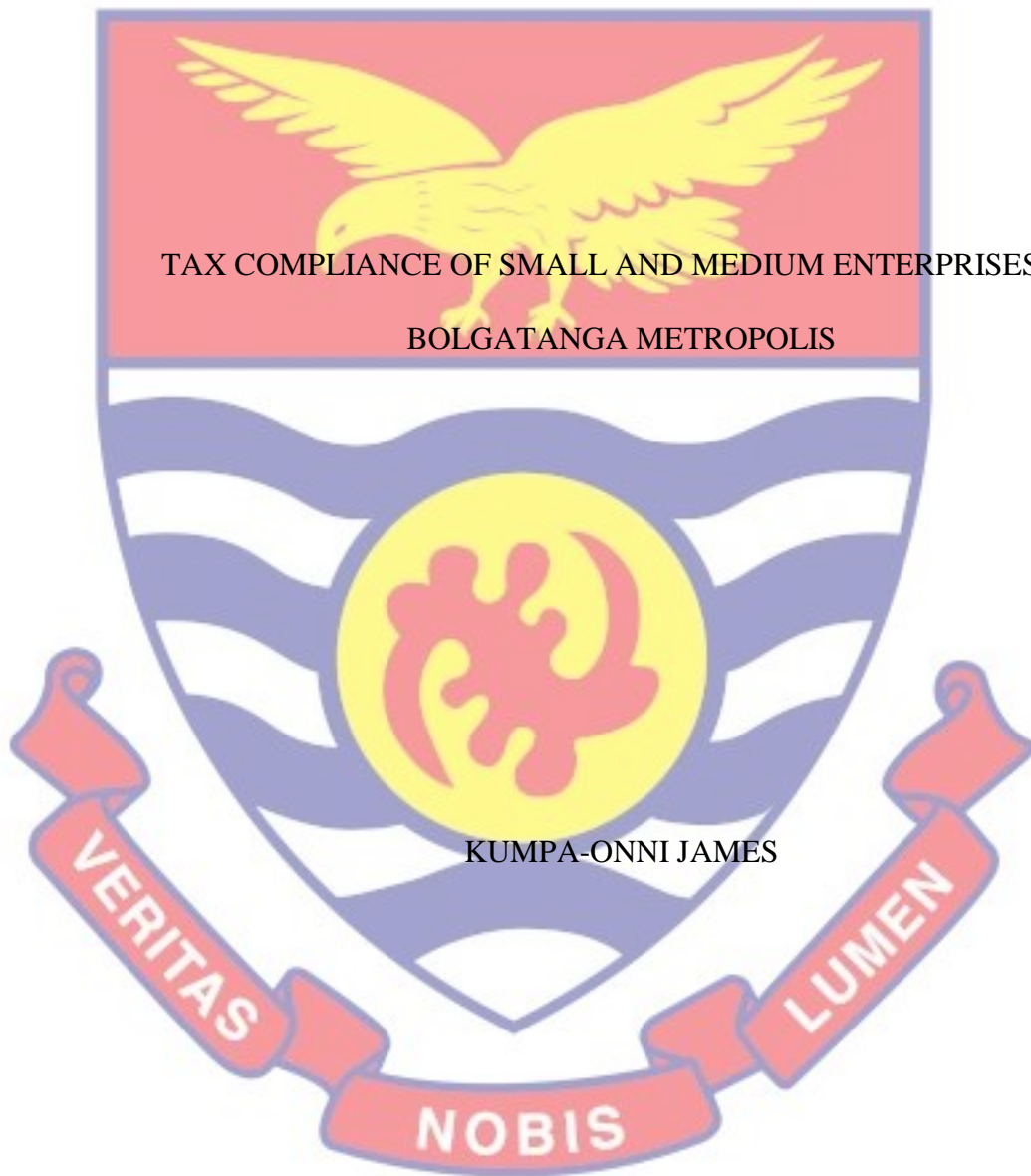


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TAX COMPLIANCE OF SMALL AND MEDIUM ENTERPRISES IN
BOLGATANGA METROPOLIS

BY

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Business, College of Humanities and Legal Studies, University of Cape Coast
in partial fulfilment of the requirement for the award of Master of Business
Administration degree in Accounting.

JUNE 2022

DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature Date

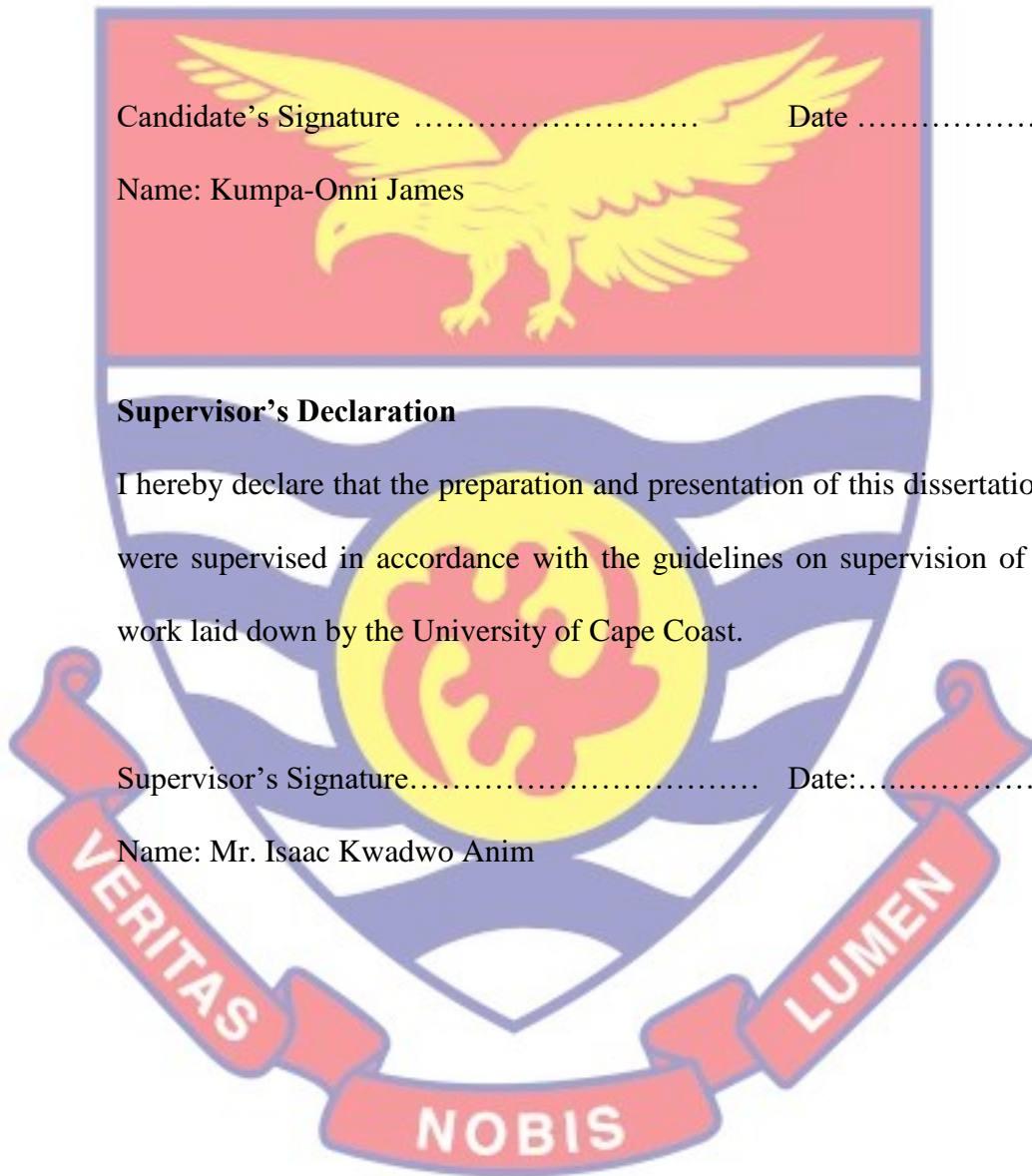
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Supervisor's Declaration

I hereby declare that the preparation and presentation of this dissertation work were supervised in accordance with the guidelines on supervision of project work laid down by the University of Cape Coast.

Supervisor's Signature..... Date:.....

Name: Mr. Isaac Kwadwo Anim



ABSTRACT

Tax noncompliance in Ghana has remained a major issue as a result of people's deliberate choice not to register and pay theocratisations. Few research studies have shown conflicting results about the drivers of tax compliance campaigns, and they have been unable to build a systematic framework that promotes individuals to comply with their responsibilities. The lack of clarity on what causes people to comply with tax limits facilitates a good understanding of the tax policy development. Due to this, the research analysed the Bolgatanga Metropolitan Assembly and how the factors influence the tax compliance behaviour of small and medium-sized business owners (SMEs). To accomplish the goals of the research, a sample of 362 from a population of 6044 was analysed using multiple regression. Using a multivariate regression model to evaluate the goals, I discovered that institutional variables had a positive and substantial effect on the degree of tax compliance among SME owners. Additionally, societal issues such as ethics had a favourable and substantial effect on tax compliance. Individual considerations also have a favourable and substantial effect on tax compliance. The research suggested that tax authorities should simplify the onerous procedures that people must through while filing their taxes. In addition, the government should not emphasize the characteristics of respondents while developing tax policy. Individual characteristics, such as age, degree of education, and field of endeavour, do not influence the tax compliance of the self-employed since they have no significant impact on tax compliance.

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DEDICATION

To my family



TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
DEDICATION	v
LIST OF TABLES	x
LIST OF FIGURES	xi
CHAPTER ONE: INTRODUCTION	
Background to the Study	1
Statement of the Problem	4
Purpose of the Study	5
Research Objectives	5
Research Questions	6
Significance of the Study	6
Delimitation	6
Limitation of the Study	7
Organisation of the Study	7
CHAPTER TWO: LITERATURE REVIEW	
Introduction	9
Conceptual Review	9
Concepts of tax	9
Concept of tax compliance	11
Perceptions of tax compliance	12
Theoretical Review	15

Theory of reasoned action	15
Fiscal Psychology Theory	16
Empirical Review	18
Tax knowledge and tax compliance	18
Determinants of SME's tax compliance behaviour	22
Institutional factors of tax compliance	23
Economic determinants of tax compliance	25
Individual factors of tax compliance	26
Social determinants of tax compliance	27
Conceptual Framework	32
Chapter Summary	33
CHAPTER THREE: RESEARCH METHODS	
Introduction	34
Research Design	34
Study Area	36
Population	37
Sampling Procedure	37
Data Source	37
Data Collection Instruments	38
Data Collection Procedures	39
Data Processing and Analysis	40
Model Specification	40
Variables description, measurement and justification	41
Diagnostic Testing	44
Chapter Summary	44

CHAPTER FOUR: RESULTS AND DISCUSSIONS

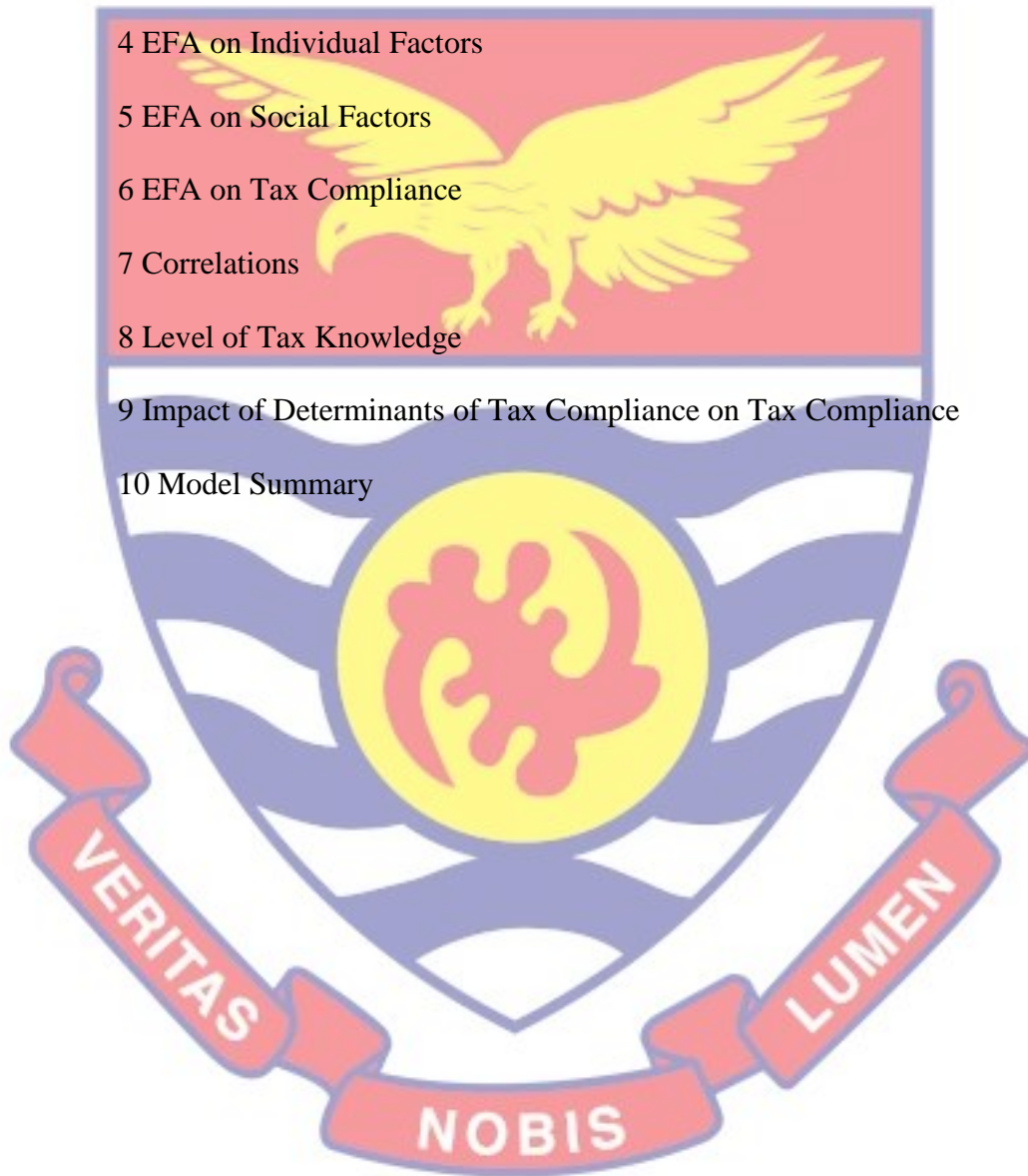
Introduction	46
Descriptive Analysis	46
Reliability and Validity Test	48
Economic factors	49
Institutional factors	50
Individual factors	51
Social factors	52
Tax compliance	53
Correlation Analysis	53
Level of Tax Knowledge Amongst Managers of SMEs in Bolgatanga	
Metropolis	55
Factors Perceived to be Affecting Tax Compliance of SMEs	58
Interactions between Tax Knowledge and Tax Compliance	60
Discussion of Results	61
Chapter Summary	63
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	
Introduction	64
Summary of Key Findings	64
Conclusion	66
Recommendations	67
Suggestions for Further Research	68
REFERENCES	69
APPENDICES	80

A	RESEARCH QUESTIONNAIRE	80
B	Krejcie and Morgan Sample Size Determination Table	86



LIST OF TABLES

Tables	Page
1 Characteristics of Demographic Variables	48
2 EFA on Economic Factors	49
3 EFA on Institutional Factors	50
4 EFA on Individual Factors	51
5 EFA on Social Factors	52
6 EFA on Tax Compliance	53
7 Correlations	54
8 Level of Tax Knowledge	57
9 Impact of Determinants of Tax Compliance on Tax Compliance	58
10 Model Summary	60



LIST OF FIGURES

Figure	Page
1 Conceptual Framework	33



CHAPTER ONE

INTRODUCTION

The government relies on revenue generated from tax for running of the affairs of the organization. The salary of employees is paid using tax revenue. Government must therefore ensure that all tax payers pay their tax obligations. This study analysis the various factors that affects SME's tax compliance in Ghana. Based on this, this chapter is devoted to discussing the background to tax compliance of Small and Medium Scale Enterprises, the problems that the Small and Medium Scale Enterprises face, the research purpose and objectives, research question significant and how the remaining chapters have been organised.

Background to the Study

One of the main motives of the government of most countries in the world is to provide a better standard of living for its citizens and institutions. One way through which the government can achieve this is through spending and borrowing of funds to provide infrastructure as well as quality policy implementation. Aside from loans that governments usually acquired from international financial institutions and other government agencies, taxation is one of the effective ways through which the government raises revenue in both developing and developed countries. Agleam (2018) defined taxation as a compulsory payment, levied by the government on individuals through which the government generates revenue. This compulsory payment is levied on, individuals, and Small and Medium Enterprises (SMEs) and companies. SMEs are one of the sectors that contribute immensely through job creation. According to the World Bank 2015 report, the 45 percent of the labour

population is been engaged by the Small and Medium Enterprises in developing economies. With the national income of these developing countries, 33 percent it is generated by the SMEs (World Bank, 2015). This shows how important the role of SMEs is significant, when it comes to governance of developing economies. Swans (2018) indicated that achievement of economic goals through allocation of resources is made possible through tax collection. Moreover, Stamatopoulos, Hadjidema and Eleftheriou (2017) suggested that revenue is generated for public expenditure through taxation. This enables the government to reduce inequalities through a policy of redistribution of income.

One of the key fundamentals of national income management, especially in developed countries, is taxation. Tax revenues provide the necessary resources for governments to invest in development, reduce poverty provide public services and develop physical and social infrastructure for long-term development. Considering the significance of assessment income to governments, consistence with charge laws is significant in the activation of duty income. Tax compliance is a citizen's capacity to agree to burden enactment, to record proper returns, announcing real available pay, to look for sufficient alleviation and refunds, and to pay all expenses due on schedule. A few endeavours and measures are taken to guarantee that charge income is prepared.

Due to the unstoppable mobilization of tax revenue by the governments to boost service quality, tax compliance is essential for nations around the world (Stamatopoulos et al., 2017). Sadress, Bananuka, Orobia and Opiso (2019) point out that continuous tax education and tax agency

resourcing are steps put in place by governments to ensure that tax collections are maximized by compliance. In its 2015 report, the Organisation for Economic Co-operation and Development has claimed that the imposition of interest and fines, tax reliefs and benefits from cash flow are steps that have been put in place by governments to conform with tax rules and regulations and thereby raise more tax revenue. Palil (2010) claims that voluntary tax compliance is encouraged by the self-assessment system. In order to improve compliance of tax laws, the Ghana Revenue Authority (GRA) has also launched a self-assessment program for corporate organisations (Ghana Revenue Authority, 2016).

The Tax Identification Number (TIN) has also been introduced for the purpose of self-assessment. Bird (2016), stresses that compliance by different taxpayers is encouraged by the establishment of an enabling atmosphere. The tax compliance of small and medium-sized businesses relies on the management or owners of SMEs' knowledge of tax laws. 15% of the revenue generated by the government has its source from tax received from SMEs (GRA, 2013). This increased by 35% in 2016 when Tax Identification Number was introduced by the government in 2015. As government revenue generations are primarily dependent on the tax paid by small and medium-sized enterprises, the study of factor leading affecting tax compliance among must be studied. Important to recognize factors leading to the tax compliance behaviour of small and medium-sized enterprises in the Bolgatanga Metropolis.

Statement of the Problem

The collection of tax money is pertinent to all states. Several factors have contributed to the decline in the rate at which the government generates revenue. In order to remove these obstacles, individuals and businesses must comply with tax laws and regulations that increase the nation's income.

According to Asante and Seidu (2011), the problem of tax mobilisation has existed since the introduction of tax payment. Compliance with tax rules by SMEs, which represent most businesses in Ghana, is a crucial element that must be considered in order to increase tax collection (GRA, 2016). However, most small and medium-sized enterprises (SMEs) in Ghana operate in the informal sector and, as a result, do not maintain business records or maintain records that are inadequate. The failure of small and medium-sized enterprises in New Zealand to comply with tax laws is attributed to the owners' cultural values, according to previous research (Yong, 2011). This may occur due to a lack of or inadequacy of tax knowledge. The sole focus of Yong's study was the influence of race (cultural values) to tax noncompliance. The researcher sampled the objects for the investigation using purposeful sampling. This investigation, however, analysed both economic and non-economic elements that contribute to tax compliance.

Numerous studies on tax compliance have been conducted in Ghana, but just a few in Bolgatanga, which is one of the busiest business centres in the country. In Sachibu's (2012) study on the causes of poor tax compliance, the culture of the tax payers was shown to be the primary cause of the low level of tax compliance. Sachibu's study focused on tax-paying individuals, whereas our study is limited to small business owners. Also, Antwi, Inusah, and Hamza

(2015) indicated in their article on the influence of demographic characteristics of SMEs on tax compliance that "women and younger businesses have been more inconsistent with tax rules and regulations." Antwi et al. (2015) only analysed eighty small and medium-sized enterprises (SMEs), and demographic data were the only tax compliance factors considered.

Nevertheless, the level of literacy of a person is not the only factor that determines behavioural compliance. Since there are no documentation or little records, submitting tax returns is arduous for SMEs. Even though SMEs make up most Ghana's businesses, they only generate 25.6% of the country's overall tax revenue. 2,4 percent of this is allocated to small businesses, whereas 23,2 percent is allocated to medium-sized businesses (GRA, 2018). Therefore, it is crucial to analyse the factors that contribute to SME noncompliance. To cover the gaps in the literature, a more comprehensive examination of the tax compliance of SMEs in Bolgatanga is necessary.

Purpose of the Study

The study analyses tax compliance of Small and Medium Scale Enterprises by using the Bolgatanga municipality as a case.

Research Objectives

The research specifically investigated the following objectives:

1. Analyse the level of tax knowledge in the Bolgatanga Metropolis among managers/owners of SMEs.
2. examine factors perceived to be affecting tax compliance of SMEs in the Bolgatanga Metropolis.
3. To analyse the extent to which tax knowledge influences tax compliance in the Bolgatanga Metropolis.

Research Questions

The following questions were used in order to achieve the objectives of the study

1. What is the overall level of the knowledge in tax amongst managers/owners of SMEs in the Bolgatanga Metropolis?
2. What are the factors perceived to be influencing tax compliance of SMEs in the Bolgatanga Metropolis?
3. What is the relationship between tax knowledge and tax compliance among SMEs in the Bolgatanga Metropolis?

Significance of the Study

This study will add up to existing studies on tax compliance and its determinants. The results and recommendation from this study can also enable educators, analysts, entrepreneurs and other stakeholders to make informed decisions. Other taxpayers may undergo more tax compliance studies. In addition, policy decisions will be taken by the country leaders and the tax authorities on how to facilitate intentional compliance to tax laws among SMEs in Ghana and Bolgatanga, in precise. This would give tax authorities the ability to recognise some of the main factors that lead to tax enforcement. Finally, SMEs will benefit from this analysis in order to help them recognize the moral duties under taxes and to benefit from government funding to grow their businesses.

Delimitation

This research focuses mainly on tax compliance among Bolgatanga Small and Medium Scale Enterprises. The study touches on the level of the knowledge, factors perceived to be influencing tax compliance and the

relationship between tax knowledge and tax compliance among the SMEs. Based on the findings of this study other possible researchable areas may include studies on the various challenges of other forms of tax such as the Value Added Tax (VAT), Capital gains tax, Import and Export duties tax. Etc. Since these have not been looked at, further research can also be done on curbing tax evasion in Ghana.

Limitation

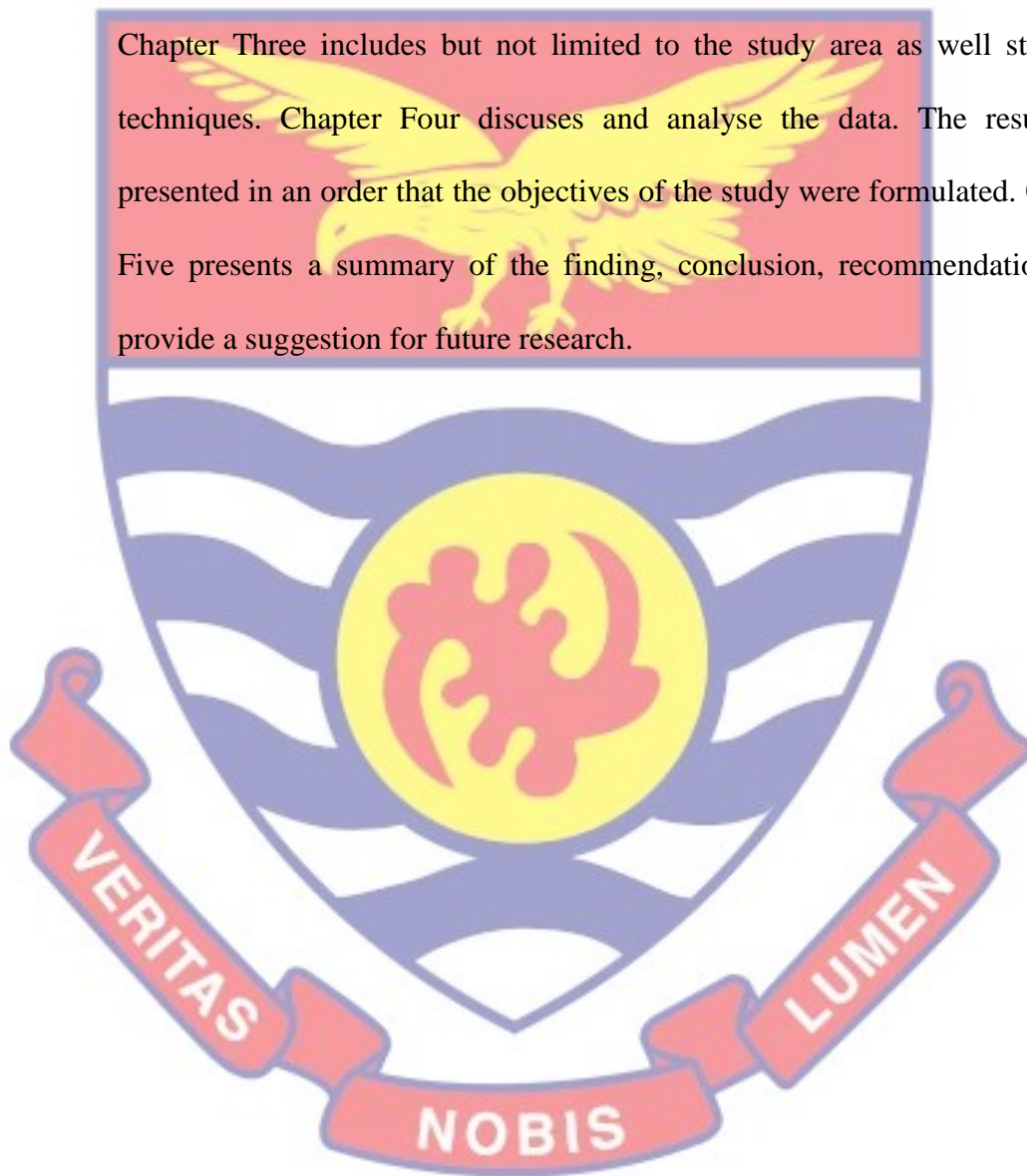
One fundamental issue regarding the study is limitation on only Small and Medium Enterprises. This therefore means that findings from the study are only limited to the self-employed and businesses that shares similar characteristics. Again, respondents who may be assisted to complete the questionnaire possess a possibility of not answering the questionnaire as expected due to the busy nature of the self-employed. These limitations posed no serious threat to the study findings.

Because questions would have to be translated into the local language for respondents to understand and respond appropriately poses a serious threat to the study but the integrity of the study's results remains same and still applicable. Despite all the above confronting variables/problems, conscious efforts where been made to bring these limitations to a negligible level, making the findings reliable and authentic.

Organisation of the Study

The study is in five chapters. Chapter One introduced the concepts of this study, the statement of the problem, research objectives and as well as questions. It also establishes the scope and nature, thus delimitation and limitation of the study. Chapter Two identifies related literature and provide a

critique of tax compliances and Small and Medium Enterprises in Ghana. It also highlighted literature from different countries on the subject matter of the study. This Chapter is organised in to conceptual review, theoretical review and empirical review. Chapter Three explains the methods adopted to gather and analyse data to address the research objectives. The sections under the Chapter Three includes but not limited to the study area as well statistical techniques. Chapter Four discusses and analyse the data. The results are presented in an order that the objectives of the study were formulated. Chapter Five presents a summary of the finding, conclusion, recommendations and provide a suggestion for future research.



CHAPTER TWO

LITERATURE REVIEW

Introduction

This section presents a review of related studies on tax compliance among small and medium scale businesses. The chapter is organised into different sections. The first section presents the analysis of the conceptual review, and covers concepts including tax compliance, and various factors affecting tax compliance. Section two discuss the theoretical literature and covers theories such as theory of reasoned action and fiscal psychology theory. The last section delt with the empirical review based on the objectives of the study.

Conceptual Review

This section of the literature review presents the conceptual review. In particular, the main constructs used in this research are tax knowledge, determinants of tax compliance and tax compliance.

Concepts of tax

In 1850, customs duty was only the form tax in Ghana (Wahabu, 2017). This was the tax which was charged on good imported from other countries. Advalorem tax of 5% was charge during this period when principal collector was situated in Cape Coast Castle. “Over the years, taxation has become an inherent power of the state to impose and demand contribution for public purposes (Yin, Wemah & Abugre, 2016). It is the principal means through which governments attempt to redistribute nation’s wealth to establish social equilibrium among people” (Olaoye, Ayenu-Agbaje & Alaran-Ajewole, 2017). Taxation is a mandated tax levied by an authority on the people of a

country in order to collect economic revenue to fund the spending of the government within a given fiscal year. Direct taxation and indirect taxes are Ghana's sources of tax revenue (Farrar, Massey, Osecki & Thorne, 2020). Direct taxes are levied from the incomes and savings of taxpayers (Abakah, 2017). Example of direct taxes includes income tax, corporate tax, capital gain tax and gift tax. Indirect taxes are those taxes which are charged on consumer spending, such as VAT, customs tariffs on imports and exports, and taxes on contact services (Amoh & Ali-Nakyea, 2019).

Through the funding of social and infrastructural programs, taxation plays a key role in the growth of the economy of most countries. In Ghana, tax revenue is very important to the country's growth because it represents a substantial proportion to the country's overall revenue (Ministry of Finance, 2019). It also helps to distribute capital, share revenue and address negative externalities by restricting imports, such as defending the domestic industry. A crucial driver for sustainable prosperity and sustainability is the availability of public services and infrastructure financed by tax collections. However, several developed countries are unable to produce the tax revenue required to achieve national growth (Ameyaw & Dzaka, 2016). Tax revenue is very important to the country's economy because it represents a substantial proportion to the country's overall revenue (Ministry of Finance, 2019). Tax revenue accounted for 75percent of net revenue in 2018. This increased by 9 percent in 2019 (Controller & Accountant General, 2012). As capital expenditure and government spending increases (Ministry of Finance, 2014), the competence of tax revenue mobilization in the country needs to be strengthened to finance these expenditures and minimize public debt. The use

of a vehicle with or without oil is equivalent to the travel of a country with insufficient financial capital. Therefore, taxation is the lifeblood of every economy (Yimbila, 2017).

Concept of tax compliance

Researchers from diverse experiences, including administration, economics and commerce, academia, physicians, and agencies of the government, have broadly explained tax compliance. Tax enforcement, in strictly administrative terminology, includes registering or informing tax authorities of the identity of the taxpayer, filing a tax return annually if necessary) and satisfying the appropriate payment deadlines (Ming, Normala & Meera, 2005). Yong (2011) also explained compliance to tax laws as a declaration of all income and payment of all taxes in accordance with the terms of tax legislation, regulations and court judgments. Loo, Evans and McKerchar (2012) added that tax compliance is the act of a person filing Income Tax Forms, accurately declaring taxable income and paying off all tax liabilities in the prescribed period without waiting for the follow-up action of the tax authority. Indeed, all the related material in the Income Tax Reports must be prepared by persons paying taxes within the time defined, and the forms must record correct tax responsibility in compliance with the needs of rules, legislation and court rulings.

In addition, Abdallah (2014) describes tax enforcement as all actions required for the tax payer to undertake, to meet with the tax law's legislative requirements. This entails the processing of tax returns that individuals and corporate organisations must file every year. Tax compliance is described by the Ghana Revenue Authority (2012) as the capacity and wish of individuals

who pay tax to conform with tax laws, report the right revenue per year and pay the exact tax on time. In other terms, income tax non-compliance encapsulates inability, though constitutionally necessary to do so to file tax returns, returns of income tax being reduced, overstatement of tax return deductions and failure to pay taxes within due date (Abdallah, 2006). By default, as stipulated in definitions and literature, self-employed entities can barely be said to conform with the simple tax compliance tenant. However, for the intent of this study which includes self-employed persons who seldom file tax returns, tax enforcement is seen as the responsiveness of taxpayers to willingly satisfy their tax obligations or when tax authorities are called upon to do so (Yin et al., 2016). On this basis, this analysis is important for understanding the dynamism of tax enforcement as it applies to self-employed individuals.

Perceptions of tax compliance

Generally, taxpayers hold a level of perception about their expenditures towards their tax obligation. Such perceptions depend on our values, needs, interests, past experiences, and a variety of other factors. Perception of the taxpayer towards his or her legal obligation to pay tax to the government is important due to the complexity of the relationship between the tax payer and government (Koessler, Torgler, Feld & Frey, 2016). Koessler and Koessler et. Al (2016) argued that the partnership between the taxpayer and the tax administration is a contract that requires mind-boggling cooperation to create a fair common ground between the taxpayer and the government. The vitality of the taxpayer-government agreement relies on the taxpayer's view of the government (Damayanti & Supramono, 2019). If

taxpayers are persuaded that the position of the public service is efficient, fair and equitable for taxpayers, then taxpayers are likely to agree to the tax laws, and this can increase the rate of enforcement (Koessler et. al, 2016; Mbilla, 2018). The level of justice and equality is another aspect that affects the understanding of tax enforcement by taxpayers. According to Agalega (2018),

one of the canons of a healthy tax structure is equality. The interpretation for this is done in two dimensions: horizontal equity (the same sum of taxes can be paid by those with the same salary or capital brackets) and vertical equity (taxes paid increase with the amount of the tax base).

The guiding theory behind vertical equity is that those who are more willing to pay taxes than those who are not should spend more. Despite this, Gwaro, Maina and Kwasira (2016) suggested three equity areas from the taxpayer's point of view (social psychology). Among them are distributive fairness, procedural justice and redistributive justice. Distributive justice is seen as the redistribution of resources (that is, benefit and cost). Taxpayers here are concerned with the fairness of their decisions and deserve to be taken into account in terms of their interests, contributions and wishes (Hofmann, Hoelzl & Kirchler, 2008). If a taxpayer determines that his tax burden is higher than that of other individuals in the same category of income, his tax compliance will decrease. Similarly, if a group perceives that its tax burden is higher than that of other groups, tax avoidance will occur for those members of the group (Sadress, Bananuka, Orobia & Opiso, 2019).

Another determinant of tax compliance is procedural justice. This is seen as the capital method of distribution. The neutrality of the methods used by the tax authorities' trustworthiness and the courteous, dignified and

respectful treatment of taxpayers as people or groups are the main elements of the supposed justice system. Taxpayers believe that tax officials have sufficient knowledge on tax laws and regulations in order to ensure that their tax returns are as effective as possible. Improved understanding of tax laws and rules is also recommended to boost the sense of justice and compliance

(Yong, 2011). Third but not least, retributive justice is interpreted as the appropriateness of sanctions when norm-breaking occurs. Retributive punishment, unnecessary and intrusive audits and unfair fines result in the fatigue and anger of taxpayers. Unfavourable retributive justice attitudes may contribute to non-compliant actions and thus increase tax avoidance and inflate the tax gap. In their review of the tax system in Ghana, Abdul-Razak and Adafula (2013) concluded that the taxpayer's views on the government often affect the intention of taxpayers to comply with the tax regulations. Consequently, the degree to which taxpayers understand that the tax scheme is equitable affects their behaviour towards tax payments (Sadress, Bananuka, Orobia & Opiso, 2019). Gwaro, Maina and Kwasira (2016) also found that the extent of non-compliance is likely to be small in circumstances where taxpayers consider the tax system to be equitable, relative to conditions where taxpayers perceive the tax system to be unjust. Yong (2011) observed that the complaints of taxpayers about the unfairness of the tax system are related to their approach to enforcement.

In the Ghanaian culture, most MSME owners have a poor view of government-collected taxes. Although they may be aware of the use of taxation as a significant source of government income as well as of public expense spending, they also have a feeling that taxes paid to the government

are not being used for the reasons intended for them. Very recently, considering the various taxes paid by taxpayers, Ghana's economy has been in decline. About this issue, since the government is unable to balance the payment of taxes with the socio-economic growth of the country, SMEs in Ghana see no need to comply with the taxes. In Ghana, SMEs can favourably interpret tax obligations when the government behaves in a trustworthy manner. High levels of confidence and tax morale can exist if the government makes effective use of tax revenues (Kuug, 2016; Naporow, 2015). Having investigated the perception of tax payers regarding tax compliance, the discussion proceeds to discuss the determinants of tax compliance behaviour, thus forming the independent variables of our study.

Theoretical Review

This section of the literature review presents the theoretical review of the study. There are two main theories which have been presented and discussed in this study. Namely: Reasoned Action theory and Fiscal Psychology Theory.

Theory of reasoned action

In 1980, Ajzen and Fishbein introduced their idea of rational action. This theory claims that individuals make rational appraisals of their behaviours, which implies that a desire to participate in any behaviour is required (Bidin & Shamsudin, 2013; Sadress et al., 2016). Consequently, the larger the behavioural purpose, the greater the possibility that the action in question will be committed (Gumel, 2017). The TRA model incorporates two essential determinants of behavioural purpose, namely, the attitude toward acts and the subjective norm. According to Ajzen and Fishbein (1980), it is

necessary to investigate people's beliefs about themselves and their community to acquire a fuller understanding of the factors that drive behaviour. Thus, beliefs are considered as the basis of a person's cognition and subjective behaviour, and as the determining factor in whether a topic is to be accepted or rejected (Taib, et al., 2008).

According to Ajzen and Fishbein's (1980) theory of reasoned action, an individual's attitude pertains to his or her own personal beliefs on behaviour. Additionally, attitude may be described as a positive or negative evaluation of an object of attitude, such as a person, action, or event. Regarding taxes, taxpayers have either favourable or unfavourable attitudes regarding tax collecting conduct. Positive attitudes result in tax enforcement, whereas negative attitudes lead to tax disobedience (Nkwe, 2013). These views may be explained by the taxpayers' expectations of the computerised tax system (Ambrecht, 1998) and their understanding of the system's efficiency and usability (Ambrecht, 1998; Davis et al., 1989). If a taxpayer is positive about computerised tax services, it is probable that tax enforcement will increase.

Fiscal psychology theory

Hasseldine dan Bebbington presented the Fiscal "Psychology Theory in 1991. This theory indicates that the taxpayer's view of the government is an important element. The Fiscal Psychology Theory emphasises the taxpayer's lack of motivation to pay taxes due to the absence of a true benefit for tax payments (Hasseldine dan Bebbington, 1991). The theory asserts that tax payers will be less eager to fulfil their tax duties if the advantages of their tax payments are not apparent. Consequently, if the government makes intelligent use of the taxes collected to provide taxpayers with incentives, taxpayers may

react by paying their taxes without the implication that they have not done so. People will not be able to pay taxes because of worry that the money will not be utilised for their advantage if the government is viewed as immoral and misusing tax monies (Asante & Seidu, 2011). The best method to explain tax enforcement is to combine economic and behavioural techniques, which comprise the tax philosophy (Asante & Seidu, 2011). This method emphasises the relevance of the government's constructive agreements in increasing the engagement between taxpayers and the government (Atawodi & Ojeka, 2016). Atawodi and Ojeka have reiterated that the unique viewpoint of taxpayers is an important aspect of this collaboration.

This "success" indicates that the amount of tax compliance is mostly influenced by the taxpayer's confidence in the administration, especially about the assessment procedure. Moreover, Muehlbacher and Kirchler's (2010) Slippery Slope model demonstrates that compliance is highly dependent on the government's opinion of the taxpayer. The connection between taxpayers and the government has a profoundly positive impact on the taxpayers' morale (Hart & Frey, 2014). According to Atawodi and Ojeka, individual taxpayers' viewpoints are vital to their capacity to comply with tax legislation (2016). According to Kogler, Batrancea, Nichita, Pantya, Belianin, and Dan Kirchler (2013) and Turner (2005), the capacity of people to comply with their tax obligations is heavily reliant on their degree of faith in the government and the "entire" tax base.

Empirical Review

Review of the empirical studies is considered under this section. The review was based on the objectives of the study. This section examines the empirical review of the various studies undertaken in the subject matter.

Tax knowledge and tax compliance

This unit addresses the significant role of tax knowledge and role of tax awareness, particularly in determining the compliance of taxpayers with taxation. This segment would review literature from previous studies, diverse methods, several variables and observations. The level of knowledge on tax is vital for the comprehension of the realities of taxation and the related attitude to taxation articulated by citizens (Wahabu, 2017). Level of education is a major determinant of the decision to evade tax or not (Richardson, 2006). Typically, tax knowledge facilitates the willingness of a taxpayer to recognize and comply with tax laws or not to comply with them (Olaoye & Ogundipe, 2018). Due to more expectations regarding taxes, improving the level of general tax awareness through education can contribute to the improvement of tax compliance. Improving knowledge of tax avoidance potential has an adverse effect on tax compliance as it encourages non-compliance to tax laws and regulations (Mukasa, 2011).

Similarly, Amah and Nwaiwu (2018) split tax knowledge into two aspects: knowledge in search of a path by structured schooling, and knowledge directly targeted at potential tax avoidance opportunities. A main factor relating to the general perception of tax laws and regulations is the general knowledge gained by taxpayers (Eriksen & Fallan, 2016). Likewise, numerous researchers have explored the effect of tax education on evasion of tax, using

the general level of education of taxpayers as an alternative to assessing the attitude towards the evasion of tax (Williams & Krasniqi, 2017). Higher tax awareness is believed to contribute to higher enforcement, according to Wahabu (2017). Previous study has found that general tax literacy has a very close association with the willingness of taxpayers to recognize tax laws and regulations and their ability to comply with them (Amah & Nwaiwu, 2018). An obvious question raised by previous researchers (Alshira'h & Abdul-Jabbar, 2019; Ahmed & Kedir, 2015; Belay & Viswanadham, 2016) is whether increasing the awareness of taxpayers would improve the degree of tax compliance, considering the evidence that tax knowledge influences the comprehension of taxpayers.

In the Kampala Central District, containing 5,000 and 1,200 small-sized and medium-sized business respectively, Ahmed and Kedir (2015) performed a report on 6,200 SMEs. In order to pick respondents from both market segments, the study used 361 respondents as the sample size which was selected using a stratified sampling technique. In regards to the capacity to assess tax obligations on revenue and capital for different taxpayers in different contexts, basic tax evidence has been assessed. Basic tax expertise blends facts with financial knowledge about tax law. The questions were explicitly framed to tackle particular tax awareness problems, while typical survey items denoted as "abstract" were also used to test overall knowledge of tax as considered in the studies by Jonas (2016). Centered on four elements used by Zhang, Smith and Gouldman (2020), which included tax debt, non-logging, pay revenue and promptness, the researcher assessed tax compliance. The study of Ahmed was split into four major sections. The study

based, firstly, on the association between the level of knowledge of tax and alleged tax equity. Second, the study attempted to develop the association among level of knowledge of tax and the level of compliance to tax laws and regulations. Also, the analysis analysed alleged tax equity and tax enforcement and finally concentrated on the relationship between tax awareness, perceived

tax equity and compliance of tax. The study finds that an important beneficial association existed between knowledge of tax and compliance of tax. This means that it is more likely that taxpayers will be compelled to meet their tax commitments with a clearer knowledge of tax issues and as such will not indulge in tax avoidance activities. The researcher also suggests that if the tax literacy of small business taxpayers increases, they are more likely to meet their tax obligations.

An important positive association between taxpayer's level of knowledge in term of tax and compliance of tax was demonstrated by the predominant outcome. The optimistic relationship means that the degree of compliance often increases as tax knowledge increases. This outcome is consistent with a past research undertaken by Palil (2010). Palil (2010) provided a comparable finding that using both indirect and theories, tax knowledge has a substantial effect on level of compliance of tax. The analysis by Palil was split into two major sections. Firstly, the analysis was centered on the level of knowledge on tax and level of compliance of tax, and the second was on determinants of tax compliance. The study utilized email to send the questionnaires to the individuals who were involved in the study. A total of 5,500 individuals were randomly chosen. The methodology of the analysis was solely quantitative. Based on the following, tax knowledge was measured:

(i) duties and rights of taxpayers (ii) knowledge of job income (iii) knowledge of dividends and interest (iv) knowledge of discounts (v) knowledge of discounts and (vi) recognition of violations, penalties and fines. The study found that experience of child relief duties and rebates tends to be strongly associated with tax compliance across the association among level of knowledge of tax and level of compliance to tax laws. The estimated correlation factor ($r= 0.36$) revealed a rational linear correlation between the level of knowledge of tax and the level of compliance to tax requirements. In addition, the approximate determination coefficient, R-Square, was 13 percent, suggesting that the variance of tax knowledge was clarified by 13 percent of the variation of level of compliance of tax. Such favorable correlation indicates that individuals who pays tax, having a substantial knowledge in tax are likely to comply to tax laws as compared to those with limited knowledge in tax.

The findings from Loo and Ho (2018) were inconsistent with Palil (2010). Their study focused in Malaysia. 250 questionnaires were issued. The researchers decided to analyse paid individual competencies in and prior to 2018 and in and after 2019 in a self-assessment framework. In their analysis, tax information was evaluated in relation to taxable income, deductions, tax breaks, tax refunds and tax credits. Results of the research revealed that while the respondents had received tertiary education, their tax expertise in relation to personal taxes was comparatively poor, rendering them incompetent and unable to practice adequate compliance.

In the other hand, Eriksen and Fallan (2019) suggest that experience of tax law is more applicable to tax preferences and attitudes. Their research was

demarcated into three key components. First, the research based on the understanding and perception of those who pays tax. Secondly, the study aimed to expose the cumulative effect of tax perception on tax compliance practices and, finally, the review covered the impact of tax agents on taxpayer behavioural decisions. The study's outcome shows that tax perception interacts positively with other people's sense of justice, tax morals and behaviour towards the avoidance of tax payment. Eriksen and Fallan (2019) found that tax payment habits can be strengthened by greater tax recognition, thereby increasing compliance and reducing the propensity to evade taxes. In the United States, though from a random mail sample of 700 households from telephone directories, Collins, Million and Toy (2019) published a report. They noticed that out of the 220 answers available tax awareness and level of education were negatively associated with tax law. To conclude, taking into account the findings of most previous studies, improving the awareness of taxpayers, particularly for small and medium-sized taxpayers, is an important element in the operation of an efficient tax system. In order to reach the government's income goal, taxpayers should be well educated and informed on tax-related topics.

Determinants of SME's tax compliance behaviour

Four key factors affecting tax compliance behaviour were described by Kung (2016). This encompasses economic factors, including institutional and emotional factors, and non-economic factors. Aside these, other researchers have like Jackson and Milliron (1986 cited in Mohd 2017; Jimenez & Iyer, 2016) itemized 14 factors of tax compliance. These factors include age, sex, educational level, level of revenue, profession, presence of peers or other

taxpayers, ethics, legal punishment, sophistication, relationship with the tax authority (IRS), sources of income, perceived tax system fairness, audit probability and tax rate. In addition to moral or ethical factors, numerous studies have also identified factors that affect tax compliance, such as demographics, income, compliance costs, and tax officers (Loo, Evans & McKerchar, 2012). Mbilla (2018) clarified that tax compliance determinants, especially among small businesses, are classified into four categories namely: economic variables, institutional factors, social factors and individual factors. Following the recommendation of researchers like Mohammed and Mohd (2017) and Loo (2006), this study reviews determinants of tax compliance in four main dimensions including: institutional drivers, economic drivers, individual drivers and social drivers. It must be admitted at this stage that the determinants of tax compliance or non-compliance of taxation may vary from country to country and individual to individual as well (Hofmann et al, 2008).

Institutional factors of tax compliance

The role of the tax authorities in reducing the tax gap and increasing voluntary compliance is obviously very critical in maintaining an efficient tax mechanism with respect to tax compliance. Different institutional factors impact the compliance level of tax among those who pay tax according to Mbilla (2018). These institutional factors of tax compliance, such as the role of the tax authority, the simplicity of the tax system and administration and the likelihood of identification, were defined by Mohammed and Mohd (2017). As a result, the importance of penalties alone in implementing tax enforcement has started to be debated by a rising number of scholars. Contemporary experiments have turned focus to the value of voluntarism, persuasion and

collaboration as a legislative mechanism to enable citizens to cooperate with tax obligations, known as the accommodative method. In favor of accommodative regulatory enforcement, state tax authorities appear to regard people not as reasonable agents, but as individuals who are willing to cooperate with regulations, partly because they believe in the laws governing the nation and partly because of long-term self-interest (Naporow, 2015). Instead of pressure, administrative bodies following the accommodative paradigm seem to be more geared towards seeking outcomes by cooperative structures and collaboration.

A striking characteristic of the accommodative strategy is that it seeks to create a constructive and cooperative partnership between regulatory authorities and those they control, according to Mohammed and Mohd (2017). Mbilla (2018) has demonstrated that individuals esteem authorities' respectful care and see those authorities who handle them with dignity as more entitled to be obeyed. The beneficial impact of ease of process, transparency and justice on taxpayer enforcement behaviour has also been seen by an increasing number of studies (Murphy 2019). Naporow (2015) claims that if regulators are prepared to automate their policies, make the systems quick and available for filling, then this would help to facilitate law support and strengthen compliance. Simplifying tax returns and administration may theoretically help taxpayers correctly complete their tax returns and boost compliance (Loo, Evans & McKerchar, 2012). Mohammed and Mohd (2017) added that simplifying the tax return would enable taxpayers, instead of hiring a tax agent, to complete the tax return on their own and thereby less enforcement costs. Braithwaite (2018) argues that tax authorities may have officers from

the Business Desk who can meet taxpayers at their homes or company premises. Officers should be able to offer support and advice on matters relating to the criteria and expenditures for registration, record keeping and reimbursement that can be claimed on tax returns. The officers of the Business Desk should also be able to offer continuing assistance and advice, either by telephone or personal visit, specifically to new business owners and self-employed individuals on the range of tax issues, whose compliance with tax laws is mostly suspect. Therefore, the study argues and suggested that structural components, such as voluntary tax schemes, merely filling processes, fewer bureaucratic and administrative procedures, and early recognition of defaults, would conform with their tax obligations when taken into account.

Economic determinants of tax compliance

The critical role of the state government in ensuring tax compliance among people is clarified by the economic determinants of tax compliance. Mbilla (2018) confirms the facts that while the effect was practically negligible, fines impact tax compliance. Strict compliance steps such as auditing and tax thresholds could in essence, enable taxpayers to be more prudent in completing their tax returns, to record all income and to assert the best deductions in order to assess their tax liability. People who believe like an audit is about to take place may however, be inclined not to disclose their real income and demand false deductions. Indeed, studies have shown that tax audits will shift enforcement conduct from negative to positive (Woodward & Tan, 2015). Further study has shown that rising rates of taxes are likely to allow tax payers to avoid their tax obligations (Alshira'h & Abdul-Jabbar,

2019; Ahmed & Kedir, 2015; Belay & Viswanadham, 2016), although lowering tax rates do not generally improve tax compliance (Ahmed & Kedir, 2015). Inconclusively, Mbilla (2018) concluded that, irrespective of the tax rate, taxpayers may opt to either report income entirely or report less.

Again, taxpayers' understanding of the spending and use of tax proceeds often impacts the scope of tax payers' tax enforcement behaviour. According to Ahmed and Kedir (2015), the factors that contribute to tax non-compliance, especially among self-employed firms, are greed and financial difficulty, government waste, low likelihood of detection and the urge to break through the mechanism. Non-compliance is, generally, justified by the ordinary people. These ordinary citizens assume that by misusing their hard-earned money by avoiding taxes, the wealthy and popular defraud the nation. Others claim that it is moral not to pay taxes, especially where tax revenue has been spent unlawfully or unethically (Belay & Viswanadham, 2016). Therefore, this study argues that economic drivers, such as tax rates, tax audit structures and public expense perceptions, influence taxpayers to comply with their tax obligations.

Individual factors of tax compliance

Data “that shows that taxpayers' perceptions and ethics play an important role in their tax enforcement decisions has started to emerge. In ensuring effective tax compliance system, the taxpayer’s internal business and operation systems are essential. For instance, good record keeping is essential for all business operations and this happens to be one of the most important elements of running a successful business. Records provide feedback on the effectiveness and profitability of operations on a regular basis.”

As far as taxation is concerned, Amah and Nwaiwu (2018) say that good records lead to more accurate revenue and expense reporting in business tax returns." Record keeping is a crucial aspect that allows businesses to satisfy their tax responsibilities. Taxpayers are expected to keep documents, including records checking requests for deductions, that are applicable to the measurement of their assessable and taxable profits. Where taxpayers do not meet with the standards for recordkeeping, they are liable under most tax legislation for a fine or conviction. There are many adverse impacts on individual taxpayers if good records are not maintained, including accountants writing incorrect tax reports for those taxpayers and the time and other services needed to produce financial reports (Naporow, 2015).

Social determinants of tax compliance

It is an undoubted fact that, tax authorities are constraints in terms of logistics to ensure inspection and audit of all taxpayers. In view of this, researchers have found various social factors affecting the compliance of tax laws among individual who pays tax. Mbilla (2018) explained that social factors such as ethics and attitude of the tax payer, perceptions of equity and fairness, political affiliation and changes on current government policy, referent groups. These essential tax compliance factors are significant to enhance tax compliance among individuals who pays tax. Tax authorities cannot resolve all the troubles of tax non-compliance by themselves alone. They therefore, need to seek the participation of the community in their decision-making in dealing with the tax compliance. Building partnerships with the community should be an intrinsic part of tax authority's operations.

Given “the fact that tax agencies are limited by resources, as revealed by the findings of Litina and Palivos (2016), third party involvement is essential if tax officials are to promote voluntary compliance. Support from third parties is crucial for the discovery and examination of non-compliance behaviour. By the assistance of interest and referent groups in the regulatory process, tax officials can improve communication and curtail potential conflict. Interest groups can provide information, analysis and perspectives, which might otherwise not have been brought to the notice of tax authorities (Imam & Jacobs, 2014). For instance, tax authorities could be informed of compliance issue and regulatory weaknesses. This type of information could inform the range of policy alternatives available to the tax authorities. By presenting information at consultative forum, third parties can contribute objectively for informed decision to be taken, thus transforming their attitude. As stated by (Imam & Jacobs, 2014), developing strategic partnerships to help shape the perception of taxpayer motives by tax agents would strengthen the expertise of tax officials and enable them to adapt to various taxpayer needs and obtain support for policies that resolve relevant concerns and activities in the industry. Compliance with taxes should not be done coercively, but rather by consultation and understanding” cooperatively (Olaoye & Ogundipe, 2018).

Studies have found that tax compliance determinants (Ameyaw, Oppong, Abraquah & Ashalley, 2016; Yin et al. 2016; and Kuug 2016) have a major impact on the informal sector in Ghana. Other empirical studies centered on Kumasi Metropolis, such as Oppong (2015); Abdul-Razk and “Adafula (2013) and Naporow (2015) centered on Tamale City; and Otabil

(2015) centered on Komenda-Edina-Eguafo-Abrem Region, which found empirical prove between tax authorization and tax compliance determinants. For instance, Ameyaw et al. (2016) explored the determinants of the casual segment compliance issues. Utilizing 600 respondents comprising casual division citizens in all the ten locales in Ghana, they found that demeanors, subjective standard and seen behavioural control were the most determinants of the casual segment compliance issues. Similarly, Yin et al. (2016) assessed tax stamp strategies and income tax compliance among private enterprises in Ghana. Using both qualitative and quantitative techniques, they discovered that the tax stamp strategy had great potential in-terms of revenue mobilization. To be precise, tax stamp strategies increased income tax revenue received from small and micro taxpayers (SMTs) in the informal sector by about 4 times (393%) for the period 2005 to 2013.”

In another study, Kuug (2016) studied the “factors influencing tax compliance of small and medium enterprises (SMEs) in Ghana. Using 500 small taxpaying units and medium taxpaying units selected from 3 regions in the country as well as the management and staff of GRA, she found that capital structure, compliance cost, tax rates, tax audits and morals of taxpayers significantly influenced tax compliance. The management and staffs of GRA recommended that, unions and associations could help increase voluntary tax compliance among the SMEs. Kuug recommended that policy developers should endeavour to make tax systems less complex and less costly to encourage SMEs to comply with tax requirements.” Despite what might be expected, Oppong (2015) evaluated the vehicle personal duty payment inside the casual sector utilizing Kumasi Metropolis as a contextual investigation and

found that, most respondents were of the view that the public authority doesn't give enough data about how they utilize citizens' cash, regarding to income tax paid. Once more, respondent's guarantee that, a huge extent of taxes was utilized by the public authority for good for nothing purposes. Besides, respondents grumbled that waste and debasement in government were high to the point that they don't see the need to pay tax.

In his study, "Promoting income tax compliance among the self-employed in the Tamale Metropolis of Ghana, Naporow (2015) found that, "respondents with no or less formal education were highly non-compliant to the payment of income tax. In addition, overstatement of expenses, understatement of income and late submission of returns were identified as forms of income tax non-compliance. Consequently, Naporow concluded that, on a whole, most of the self-employed in the Tamale Metropolis were not familiar with income tax laws and that was why most of them were not on the tax roll of Ghana Revenue Authority (GRA). Other factors like ignorance, lazy accounting, complexity of procedures, and non-beneficial of taxes also influenced income tax non-compliance decisions of most the self-employed within the metropolis.

Still in Tamale, Abdul-Razak and Adafula (2013) assessed citizens' demeanor and its impact of compliance to tax laws and found that, people were exceptionally worried about the amount of duties they pay. Expressed in an unexpected way, the rates paid on income taxes in Ghana were commonly seen to be high. Besides, the weight of taxes paid influences the mentalities of people and this illuminates how they assess the tax system and therefore, their compliance to the laws governing taxation. Individuals have little respect for

the measure of taxes paid by them in contrast with sums paid by higher pay workers. They added that, the degree of administrative responsibility” and straightforwardness didn't essentially affect citizens' mentalities.

In the Komenda-Edina-Eguafo-Abrem (K.E.E.A) Municipality, Otobil (2015) “studied taxation of the informal sector and found that, high income tax, business non-profitability, distance difficulty in paying tax, unnecessary or misuse of tax income by government, tax non-compliance by other colleagues, low-income tax education, advice from experts, non-registration of businesses and low educational level account for high income tax non-compliance. Consequently, Otobil (2015) suggested that, well informed and frequent tax education, sanctioning tax evaders, motivating taxpayers with incentives, involvement of taxpayers in tax decisions, drawing the tax collectors closer to the taxpayers and having master list of all informal sector businesses would help to improve tax compliance in the” municipality.

In a random survey of 700 families from phone registries, Collins, Million and Toy (1992) conducted an examination in the United States. They saw that knowledge on taxation and the degree of schooling were contrarily connected with tax law, out of 220 accessible answers. All in all, considering the consequences of most of past studies obviously improving the consciousness of citizens is a fundamental component in running a viable assessment framework, especially for SMEs. Citizen’s ought to be all around prepared and educated on expense related topics to meet the government's income objective.

Conceptual Framework

The compliance behaviour of a taxpayer can be impacted by several variables, which ultimately affect the conduct of the taxpayer. The variables affecting tax enforcement and/or non-compliance actions vary from country to country and even from person to person (Kirchler, 2007). Taxpayer enforcement has been presented mainly from three scientific viewpoints, according to Kuug (2016): the basic philosophy of deterrence, economic deterrence models and fiscal psychology. Income tax enforcement is seen as a decision to optimize revenue that balances the net benefit of underreporting revenue or over demanding against the increased chance of identification and penalization (McGraw & Scholz, 1991). The conceptual framework was generated from a perilous analysis of current literature on the variables from Mukasa's (2017) work, Palil (2010). (2010). Following Mbilla's (2018) recommendation, which defined 1) economic factors (tax rates, tax audits and government spending expectations); 2) administrative factors (tax authority position, ease of tax returns and administration and likelihood of detection); 3) social factors (ethics and mindset, equity and justice perceptions, political allegiance and currency changes) (personal financial constraints, awareness of offences and of penalties). Tax knowledge has been applied to the system, as one of the goals was to examine the interrelationship between tax knowledge and tax enforcement. Figure 1 shows this.

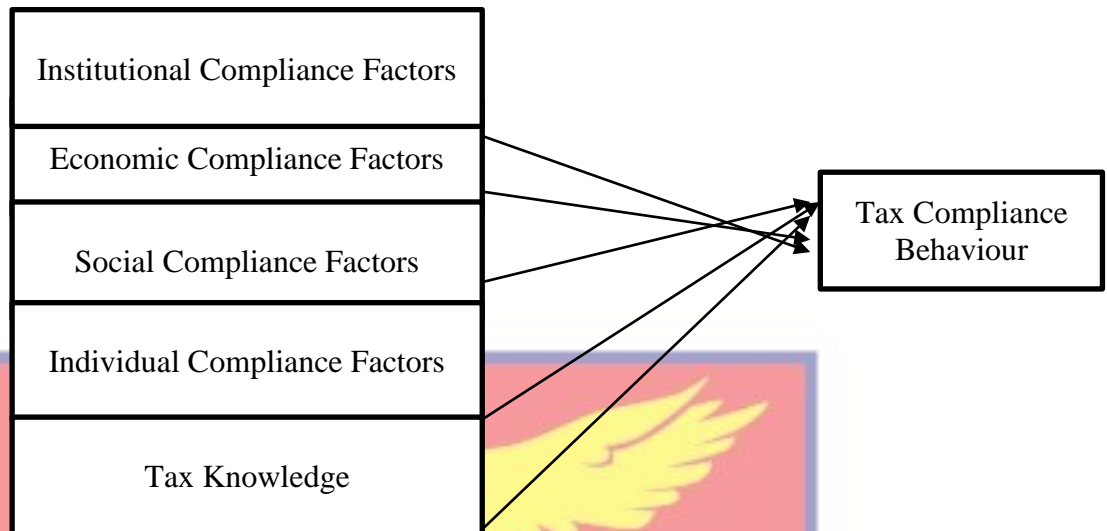


Figure 1: Conceptual Framework

Source: Author's Construct (2021)

Chapter Summary

Concept of taxation cannot be underestimated in any policy and academic discussion. Tax remains an important source of revenue for government and continued to provide social goods and develop the economy. Literature report that people intentionally and unintentionally do not comply or ignore to file their tax returns appropriately and timely. Therefore, governments ensure compliance in order to get all individuals to fulfill their tax obligation. Literature has extensively examined several factors or determinants influencing tax compliance. A careful look at the drivers of tax compliance behaviour reveals three integrated determinants of tax compliance behaviour namely: Institutional drivers, Economic driver, and social drivers. These integrated drivers influence individuals to either comply or not to comply with their tax obligation. Contextually, this study sought to explore the effect of these factors on tax compliance behaviour of the indigenes in the Bolgatanga Metropolitan Assembly.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter explains the different methods used in study. It started from the methods use in the idea conceptualisation, how samples were arrived on, designing of research instrument, how data was collected, analyse and discussed. The specific sub-sections in this chapter includes the research design, population, samples and sampling procedure, research instrument, data collection procedure, data analysis, reliability and validity test, ethical issues and chapter summary.

Research Design

Choosing an effective technique is particularly necessary in order to achieve more valid statistical results (Silverman, 2011). The methods of analysis may be quantitative or qualitative. The goal of this research is to analyse the interrelationship between the four tax compliance determinants and tax compliance as a dependent variable. Therefore, a quantitative approach was the most fitting within the context. The quantitative approach employs rigorous empirical experiments, including algebra quantification and statistics (Mbilla, 2018). In addition, quantitative approaches are used to put the guesswork to a more accurate conclusion. This is because the conclusions are usually focused on objective approaches instead of mere analysis, and thus permit potential application and comparison with other works. Also, the quantitative analysis allows for higher coverage of respondents and, ensures effective and efficient comparison with other studies (Whaley, 2014). In addition, quantitative approach enables researchers to generalize results on the

whole population since it allows inferential statistics to be used in any case, it ought to be famous that this approach to research approach needs flexibility and hence makes it exceptionally troublesome to adjust the same approach to analysing or measuring human behaviour (Saunders, 2013).

Depending on the nature of the analysis, the selection of the appropriate methodology must be done based on the researcher's discretion. Consequently, given the intent and scope of this research, where most of the analyses are of a quantitative sort, it is believed that the most effective approach to quantitative analysis should be pursued. An explanatory survey design was deemed acceptable due to the quantitative aspect of this analysis. A questionnaire is a means of gathering knowledge regarding the attributes, behaviour or views of many people referred to as a population (Baako, 2017). Since the research would be capable of generalizing outcomes to the whole population, the option of survey design was acceptable.

A sample is a procedure in which people are selected from a population and then analysed in order to derive conclusions about the population. A survey's explanatory design can be classified as contingent cross-sectional or longitudinal, depending on its purpose. The cross-sectional survey method was used in this study since a large number of respondents were required to be included for the purposes of the investigation. For the purposes of this study, it is assumed that the nature of the explanatory survey will aid in determining the link between tax compliance variables and the actual compliance behaviour of SMEs in the Bolgatanga Metropolis.

Study Area

Bolgatanga Municipal District and the Upper East Region of Ghana, bordering Burkina Faso. Bolgatanga is home to over 2012 settlements and a population of approximately 66,685 people. Bolgatanga is 161 kilometres (about 100 miles) north of Tamale. Bolgatanga is in the Red Volta River Valley (a major elephant migration route), with the White Volta River and the cliffs of the Gambaga Escarpment to the south forming the Upper East Region's southern boundary.

Bolgatanga (Bolbatanga) was named after the Guresi words bolba (migrants) and tana (pyramid). Bolgatanga was historically located at the southern end of the ancient Trans-Saharan trade route. Near Bolgatanga, the eastern route met the Sahelian route. Handicrafts, particularly straw baskets, hats, and fans, as well as leather goods, metal jewellery, and indigenous attire were exchanged for kola nuts and salt along the route. The Upper East Region, which includes Bolgatanga, was previously known as the Upper Region. Between 1902 and 1960, the Northern Territory was a British protectorate; on July 1, 1960, it was divided into the Northern and Upper Regions. In 1983, the Upper Region was divided into the Upper East and Upper West Regions. Bolgatanga's residents came from Yoa, a community in the Kasena Nankana east municipal. Tanzui Apoka Kariyane led the Apoka biisi of Bukere, a community in Bolgatanga. Zuarungi, Dagweom, Bukere, Poaliko, Soe, Gumbiisi Zongo, Yarigabiisi, Atulbabiisi, Tindaamoligo, Zongo are all communities in Bolgatanga.

Population

Population refers to a group of persons from which a sample is drawn (Nsawah-Nuamah, 2005). The population is a representation of the sample. The population of the study is the subject of the initiative of a researcher (Ozili, 2018). The target population for this analysis consists of the owners of Bolgatanga Metropolis Small and Medium Enterprises. A total population of 6044 Small and Medium Enterprises were recorded in Bolgatanga Metropolitan Assembly (NBSS, 2018).

Sampling Procedure

A sample is a considerable number of respondents or observations that represent a target population (Evans, Hastings & Peacock, 2000). The research adopts the finite population sample size formula suggested by Krejcie and Morgan (1970). Based on Krejcie and Morgan (1970), a sample of 362 was appropriate for the study considering a population of 6044. For the sake of representativeness, the study adopts a probabilistic sampling technique such that all the respondents have equal chance to be selected. In doing so, a simple random sampling in line with the probability sample technique was used.

Data Source

This research used primary data as its main data sources. According to Marshall and Rossman, (2016), established that primary data is a data which the researcher created to be used for a specific objective to address research problem. This data is originally collected by the researcher from the target population or sample. The primary source was the source of data for the analysis. This data was collected from managers of SMEs based in the

Bolgatanga Metropolitan Assembly. This data was obtained for a given period of two months.

Data Collection Instruments

Primary data collected to be used by the research by adopting structured questionnaire. The questionnaire was designed based on review from literature that was largely presented to categorize and determine concept which was being used from past research works which are similar. Further, the questionnaire was used as they are easy to administer and to save time. The respondents were given the questionnaire to answer without interference and influence from the researcher or any other third party. The respondents were given ample time to answer the items on the research questionnaire. After some period, the questionnaires were collected. The questionnaire was divided into four (4) distinct sections numbered (A) – (D). The first part of the questionnaire sought to ask respondents to provide demographic data such as age, sex, sectors of operation among others. Sections ‘B’ sought to elicit information on the determinants of tax compliance among SMEs in the metropolitan assembly. Section “C” collected data on tax knowledge. Lastly, Section “D” elicit information on the influence of Tax compliance determinants on tax compliance behaviour. The set of items were structured using the Likert-scale format with a five-point response scale and some open and closed-ended items. The open-ended questions will give the respondents the avenue to decide the aspect, detail and length of his answer. Close-ended questions are known to provide control over the participant’s range of responses by providing specific response alternatives (Borden & Abbott, 2015). The measurement scales (questions/content) reflect various literature

that the researcher reviewed, thus the researcher proposed that the questions or measurement scales will help determine its influence on tax compliance among SMEs in the Bolgatanga Metropolis.

Data Collection Procedures

The researcher went out to meet with the respondents in person to hand out the questionnaires, and then they gave the respondents one week to turn in their responses. Before then, the researcher went around to the different offices to talk to the heads of the different units about the purpose of the study. This was done as a formal way of introducing the researcher to the respondents, which ultimately made it possible for the researcher to collect data from the respondents. After all of the information was gathered, it was added up and analysed. The entire process of data collection took place over the course of one week.

During the course of the research, certain standards of conduct and ethics were maintained. The respondents were provided with information regarding the objectives of the study, and their consent was solicited. Information was gleaned from the respondents based on their own volition to participate in the study. The data were not collected through any means that were unethical, including but not limited to: coercion, deceit, or inducement. In regard to the information that was provided, neither the identity of the respondents nor the confidentiality of the information that was received was compromised in any way. The information that was obtained from the participants in the study was used for any other purpose besides the one being investigated in this study.

Data Processing and Analysis

After “receiving the research questionnaire, they were rigorously checked to find out if they were answered well and were qualified to be included in the sample. Items with dubious or necessary missing responses were taken out during the analysis since it would have had bad repercussions on the research results. Questionnaires that have good responses were code and keyed into Software Package for Social Sciences (SPSS V. 21). The data were then assessed for its accuracy and was modified if it required editing. After accurate data have been acquired, statistical analysis tools which include tables, and correlation analysis were employed to make necessary comparison for all the item in the research questionnaire. This helps to have a clear picture of how the data would be like and the accuracy of the response provided by the” respondent.

Statistical Package for Social Science (SPSS) was first used to analyse the respondents' demographic responses. This data was analysed and interpreted with descriptive statistics such as the use of mean, standard deviation (Boohene, 2017). Secondly, regression was used in order to test the factors affecting tax compliance. Data analysis using regression equation modelling was done in four main levels: Exploratory Factor analysis (EFA), Reliability Test, test of normality, Fitness of the model and finally, the significant of the coefficients.

Model Specification

The model for the study was adopted from Mbilla (2018)’s study which was done in Bawku West. According to Amah and Nwaiwu (2018), compliance to tax is dependent on the tax knowledge the individual has, the

effectiveness of the tax institution, individual factors attributed to the tax payer, social factors and economic factors. The study therefore suggested the model in equation 1 for the study, based on the different literature examined in the study.

$$Y_i = \alpha + \beta_1TK_i + \beta_2INS_i + \beta_3IND_i + \beta_4ECO_i + \beta_5SOC_i + \varepsilon_i \dots \dots \dots (1)$$

Y_i is the dependent variable and it represent tax compliance, α is constant, β is the are coefficients of all the variables in the study, ε_i is error term TK - Tax knowledge, INS - Institutional factors, IND - Individual Factors, ECO – Economic Factors and SOC - Social factors.

Variables description, measurement and justification

Based on three variables from previous literature, the perceived factors of tax compliance were assessed. The variable includes; i. Institutional Factors, (ii) Social Factors (iii) Economic Factors. Mbilla (2018) in his study on drivers of tax compliance among self-employed in Ghana included these four factors as the drivers for tax compliances. This study therefore adopts similar measurement.

The research has found key factors of economic compliance, such as tax laws and structures (Keen, 2014), cost of compliance (Laffer, 2014), tax laws, inspections, probability of identification of tax evasion (Woodward & Tan, 2015). From theoretical perspective, the theory of reasoned action explains that a state can ensure tax compliance when there is effective audit and penalties for non-compliance. In view of that, institutional factors were a factor that leads to tax compliance (Mbilla, 2018; Amponsah & Adu, 2015). Respondents were asked about how effective the tax institution was. So, questions like “how effective tax authorities are in detecting defaulters” were

asked. Other studies measured institutional factors by using secondary data. This might not give the exact effectiveness of the tax institution since they prepare that information.

Social factors such as behaviour and subjective expectations (Keen, 2014), ethnic disparities (Engida & Baisa, 2014), morals and ethical principles of taxpayers and collectors (Amah & Nwaiwuu, 2018). Tax authorities must focus on developing networks to improve perceptions and community awareness of tax compliance, as suggested by Sapiei and Kasipillai (2013). Undoubtedly, tax authorities are administrative constraints for tax evaders who have submitted inspections, audits and monitors. Alternatively, numerous social factors affecting tax enforcement by taxpayers have been identified in comprehensive studies. The social causes that decrease tax compliance is perceived to be shifts in laws, filing tax returns (Amponsah & Adu, 2015). The ethical positions of respondents on the filing of tax returns are regarded in this analysis as a framework for evaluating social factors.

The main economic determinants of tax compliance, according to Mbilla (2018), comprise of rates of tax, audit of tax, and expectations of government expenditure. Schneider, Raczkowski and Mroz (2015) claimed that country heads and the tax authority are the key parties to the tax system in order to clarify tax compliance by self-employed, so these entities could design an efficient and reliable regulation and collection process in order to reduce tax evasion. In other words, a country must first provide a practicable economic tax scheme. Studies have also shown that further tax avoidance results in unnecessary tax charges and fines (Kirchler & Hoelzl, 2018). The economic factors of tax compliance clarify the important role that the state

government plays in maintaining citizens' tax compliance. Significant economic factors of tax compliance, according to Hallsworth, Metcalfe and Vlaev (2006), include rate of taxes, audit of taxes and expectations of government expenditure. This was also considered by Mbilla (2018) as tax compliance driver.

Mbilla (2018) categorically clarified that it is important for individual tax compliance drivers to have personal financial restrictions, knowledge of offenses and penalties. In addition, Chan, Troutman and O'Bryan (2010) indicated that because of lower compliance levels, Hong Kong taxpayers have a less friendly attitude towards the tax system. Other studies have found that significant individual drivers influence tax enforcement, such as fines for non-compliance (Amah & Nwaiwu, 2018). Evidence has started to demonstrate that taxpayers' perceptions and ethics play a major part in their tax compliance decisions (Muehlbacher, Kirchler & Schwarzenberger, 2011). Saad (2014) categorically clarified that it is important for individual tax enforcement drivers to have personal financial restrictions, knowledge of offenses and penalties. The study measured individual factors by considering the individual activities that the respondents do in relation to compliance of tax.

Previous studies have demonstrated the effect of tax knowledge on taxpayers' tax compliance behaviour (Mohamad, Mustafa & Asri, 2015). Jackson and Milliron (2015) have argued that education has two components: the general degree of fiscal awareness and the degree of knowledge about incentives for tax evasion. Level of tax knowledge, which is the fifth variable of the study, the six variables were calculated based on the respondents' responses, namely: comprehension of (i) "rights and obligations; (ii) job

income; (iii) investment income; (iv) company income; (v) tax relief; and (vi) perception of offences and” fines. Poonam (2019) in his study on Evaluation of factors influencing voluntary tax compliance: The Case of Self-Employed, measured tax knowledge using the same variables. This study also adopts the same level of measurement.

Diagnostic Testing

Typically, specification tests for linear regression are based on residuals (Akhisar et al, 2015). Based on the regression model, diagnostics for the model were examined. The model's error term was identified. Using the Durbin Watson Model, the autocorrelation between the independent variables and the error was examined. The Variance Inflation Factor and tolerance were also used to determine if multicollinearity exists between any of the independent variables. The coefficient of determination was used to determine the proportion of the dependent variable that can be explained by the independent variables. All these tests were presented and fully addressed in Chapter Four.

Chapter Summary

This study adopted the research design of explanatory surveys. A quantitative methodology was followed by the researcher. In the Bolgatanga Metropolitan Assembly, the analysis was conducted within the framework of the effect of tax compliance determinants on tax compliance behaviour among SMEs. SMEs in the Bolgatanga Metropolitan Assembly constitute the target population. A sample was taken from the population of SMEs using a simple random sampling. Using a questionnaire, primary data was gathered. SPSS was used in analysing data with descriptive statistics to evaluate the field data

and multiple regressions were utilized to accomplish the analysis objective. In the data collection and analysis, validity, reliability and ethical problems were observed.



CHAPTER FOUR

RESULTS AND DISCUSSIONS

Introduction

This chapter centres on the results and discussion in relation to relevant literature. Both descriptive and inferential statistics were presented. The descriptive statistics include summary statistics and further discuss the correlation matrix. The inferential statistics involves estimating the regression model in order to explain the cause-and-effect relationship existed between variables of interest.

Descriptive Analysis

The analysis evaluated the demographic profiles of the gathered data from the respondents. The respondents were asked to state their gender, age, highest level of education, operations in the sector and the regulatory authority registered by the organization. Table 1 shows the demographic characteristics of the respondents.

Of the 362 respondents, 201 were males, representing 55.5%, while 161 were females, representing 44.5%, from Table 1. The male and female part of the survey shows the percentage of the general population of Bolgatanga individuals engaged in small and medium-scale enterprises. Males dominate when it comes to the operation, establishment and management of Small and Medium Enterprises.

Of the 362 respondents who took part in the survey, 89 were between the ages of 18 and 24, comprising 24.6%. This was the highest age group of the data. This was followed by individuals between the age of 55 years and above with a frequency of 86, representing 23.8 percent. Respondents between

the age of 45 and 54 were the next highest age category with a frequency of 68, representing 23.8 percent. The next higher age category of the data was 34 and 44 which recorded a frequency of 65 respondents representing 18 percent of the respondents. The age category which recorded the least respondent was 25 and 34 years which recorded a frequency of 54 which also represented 14.9 percent.

The next demographic characteristics on the questionnaire were sector operations. The respondents were given four options to choose from. Out of 362 respondents, 98 were operating in the Agric and Agric Business sector. This represented 27.1 percent of the respondents. The next highest operating sector was the sector that renders services. The Service Sector recorded a frequency of 92 respondents which represented 25.4 percent of the total sample. SMEs operating in other sectors recorded the next highest frequency with several 90 which represents 24.9 percent of the respondents. SMEs operating in the manufacturing sector recorded the least respondents with a frequency of 82 representing a 22.7 percent.

The final demographic characteristics were the regulatory authority of the various SMEs. Four options were given to the respondents to choose from. 106 of the respondents out of 362 respondents were regulated by NBSSI representing 29.3 percent. 92 of the respondents were only regulated by GRA due to the taxes which are being collected by the GRA. 77 of the SMEs were been regulated by RGD representing 21.3 percent of the respondents. Also, 87 of the respondents were being regulated by other regulatory authorities representing 24 percent.

Table 1: Characteristics of Demographic Variables

Demographic Variable	Frequency	Percent
Gender		
Male	201	55.5
Female	161	44.5
Age of Respondents		
18-24	89	24.6
25-34	54	14.9
34-44	65	18.0
45-54	68	23.8
55 and above	86	23.8
Educational Level of Respondents		
Non-Formal	18	5.0
Primary Education	229	63.3
Secondary Education	63	17.4
University	52	14.4
Sector of Operations		
Service	92	25.4
Manufacturing	82	22.7
Agric and Agric Business	98	27.1
Other works	90	24.9
Regulatory Authority		
GRA	92	25.4
RGD	77	21.3
NBSSI/AGI	106	29.3
Other	87	24.0
Total	362	100.0

Source: Field Survey (2020)

Reliability and Validity Test

Reliability and validity in research projects are significant to determine the degree to which the scales of the measurements are valid and reliable. To conduct this, the Cronbach Alpha test was used to investigate internal consistency of the constructs. The Cronbach Alpha acceptable test rate was 70% or 0.7 and any construct recording below this limit indicates poor internal consistency. The factor analysis was applied to examine the measurement scale validity. For an acceptable factor analysis number of vital hypothesis is important. For example, Kaiser-Meyer-Okline (KMO) values must be 50%

(0.50) or more and the probability of Bartlett's Test of Sphericity must be significant (p-value < 0.05). Furthermore, the factor loadings of the elements or items must be greater than 0.6 and the Average Variance Extracted (AVE) must be 0.5 or better (Hair, 2010). The reliability and validity of result is resented for economics factors, institutional, individual and social factors as well as for tax compliance.

Economic factors

In assessing the construct, five elements were used to measure economic variables. After the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (.768), determinant (.037) and Bartlett's Sphericity Test ($\chi^2(10) = 1182.798$; $p < 0.005$) assumptions were met, factor analysis was conducted on all five items. The five components used to measure the construct were highly loaded (>.5). On the five (5) items using the Cronbach Alpha, reliability tests were carried out. Cronbach's Alpha was registered at .876. This suggests that the five elements were accurate in measuring the economic factors of the framework. The naïve method was used to measure the economic factors.

Table 2: EFA on Economic Factors

	Factor Loading
I comply with my tax commitments so it is ok for me to pay the tax rates.	.877
As assess reviewers visit me to review my tax returns, I complete and record my tax return day by day.	.893
I fulfill with my tax responsibilities since the management judiciously invests the tax proceeds	.809
I prepare my tax returns and I get government benefits.	.781
The tax rate is simple, so I still file my tax returns with the tax authorities.	.730
Cronbach Alpha	0.874
Eigenvalue	3.363
% of Variance	67.26
KMO=0.768; $\chi^2=1182.798$; df=10; p-value=0.000	

Source: Field Survey (2020)

Institutional factors

As far as institutional factors are concerned, five elements or indicators were also used to measure it. After the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (.884), determinant (.013) and Bartlett's Sphericity Test ($\chi^2(10) = 1562.18; p < 0.005$) were presumed, factor analysis was also conducted on all five measures. The five elements used to calculate the construct were highly loaded ($>.5$). On the five (5) objects using the Cronbach Alpha, reliability tests were carried out. Cronbach's Alpha was registered at .816. This suggests that the five elements were accurate in determining the institutional factors as a construct. The naïve approach was used to calculate the variables of the institutional factor.

Table 3: EFA on Institutional Factors

	Factor Loading
I fulfil my tax responsibility since it is optional for me to file with the tax authorities.	.810
My tax returns are still filed because the tax returns are easy for me to prepare.	.909
The accounting structure makes it easy for me to file my tax returns with the tax office.	.911
I register my tax return because the identification of defaulters is simple for tax authorities.	.905
I record my tax returns since there's no complication within the filling stage of my tax return and secret subtle elements	.912
Cronbach Alpha	0.932
Eigenvalue	3.964
% of Variance	79.27
KMO=0.884; $\chi^2=1562.180$; df=10; p-value=0.000	

Source: Field Survey (2020)

Individual factors

Five elements or metrics were often used in measuring individual factors. After the presumption that Kaiser-Meyer-Olkin Measure of Sampling Adequacy (.913), determinant (.013) and Bartlett's Sphericity Test ($\chi^2(10) = 2047.833$; $p < 0.005$) were reached, factor analysis was also conducted on all five variables. The five elements used to calculate the construct were highly loaded ($> .5$). On the five (5) items using the Cronbach Alpha, reliability tests were carried out. Cronbach's Alpha was registered at .957. This suggests that the five elements were accurate in measuring the individual factors of the construct. The naïve method was used to measure the individual variables of the construct.

Table 4: EFA on Individual Factors

	1
As I manage my finances well enough that I can pay, I register and pay my fee.	.941
I know the crimes; therefore, I do comply with my tax duties.	.933
There are serious penalties for defaulting tax liability, so I always comply with my tax liability	.954
I don't need my company to recuperate from court fights, so I still record my charge return.	.924
I believe that filing my tax return would improve my business reputation as a business owner.	.869
Cronbach Alpha	0.957
Eigenvalue	4.274
% of Variance	85.48
KMO=0.913; $\chi^2=2047.833$; df=10; p-value=0.000	

Source: Field Survey (2020)

Social factors

About social factors, in measuring it, five elements or indicators were also used. After the presumption that Kaiser-Meyer-Olkin Measure of Sampling Adequacy (.837), determinant (.013) and Bartlett's Test of Sphericity ($X^2(10) = 1154.05; p < 0.005$) were reached, factor analysis was also conducted on all five variables. The five elements used to evaluate the construct were highly loaded ($>.5$). On the five (5) objects using the Cronbach Alpha, reliability tests were carried out. Cronbach's Alpha was registered at .886. This suggests that the five elements were accurate in evaluating the social factors as the construct. The naïve method was used to measure the social variables of the construct.

Table 5: EFA on Social Factors

	1
I prepare my tax returns and the daily filing of my tax returns is ethical.	.769
I file my tax return because contributing my quota to national growth is fair and equal.	.881
Changes to existing government regulations allow me to quickly file my tax returns.	.884
As a corporate owner, it is my attitude to file my tax declarations	.865
As part of a corporate community, my job is still to file my tax return.	.801
Cronbach Alpha	0.886
Eigenvalue	3.539
% of Variance	70.78
KMO=0.837; $\chi^2=1154.05$; df=10; p-value=0.000	

Source: Field Survey (2020)

Tax compliance

As far as tax compliance is concerned, five items or indicators were also used to assess it. After the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (.814), determinant (.013) and Bartlett's Sphericity Test ($\chi^2(10) = 645.113$; $p < 0.005$) were presumed, factor analysis was also conducted on all

five measures. The five elements used to measure the construct were highly loaded ($> .5$). On the five (5) objects using the Cronbach Alpha, reliability tests were carried out. Cronbach's Alpha was registered at .853. This suggests that in evaluating the Tax Compliance construct, the five elements were accurate. To calculate the Tax Compliance construct, the naïve procedure was used.

Table 6: EFA on Tax Compliance

	1
I have no hope of evading filling and paying taxes because of the easy filling procedure.	.788
My taxes are utilized by the public authority for my advantage, so I don't wish to diminish my official tax aggregate.	.814
As an ethical business citizen, if I do not file my tax return annually at the tax office, I would feel terrible.	.869
For me the expense rate is alright" so I would prefer not to cover any detail in my government forms	.611
The tax is fair and fair, so I am ready to file my tax returns.	.843
Cronbach Alpha	0.853
Eigenvalue	2.846
% of Variance	56.93
KMO=0.814; $\chi^2=645.113$; $df=10$; $p\text{-value}=0.000$	

Source: Field Survey (2020)

Correlation Analysis

Table 7 indicates the results from the correlations. The correlation among the six constructs were analysed. From Table 7, “there was a large

positive significant correlation between economic factors and institutional factors [$r = .756, n=362, p < .05$]. With increasing economic factors and increasing institutional factors. Also, there was a large positive correlation between economic factors and individual factors as well [$r = .865, n=362, p < .05$]. With increasing economic factors and increasing individual factors.

There was also a large positive correlation between economic factors and social factors [$r = .884, n=362, p < .05$]. Economic factors and Tax knowledge moderately correlated with each other. The correlation between these variables was positive indicating an increasing economic factor and increasing tax knowledge [$r = .696, n=362, p < .05$]. Economic factors also moderately correlated with tax compliance [$r = .687, n=362, p < .05$]. With increasing economic factors and increasing tax compliance.

Table 7: Correlations

		ECO	INSTI	INDI	SOC	KNW	TCOM
ECO	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	362					
INSTI	Pearson Correlation	.756**	1				
	Sig. (2-tailed)	.000					
	N	362	362				
INDI	Pearson Correlation	.865**	.707**	1			
	Sig. (2-tailed)	.000	.000				
	N	362	362	362			
SOC	Pearson Correlation	.884**	.670**	.808**	1		
	Sig. (2-tailed)	.000	.000	.000			
	N	362	362	362	362		
KNW	Pearson Correlation	.696**	.581**	.607**	.777**	1	
	Sig. (2-tailed)	.000	.000	.000	.000		
	N	362	362	362	362	362	
TCOM	Pearson Correlation	.687**	.589**	.686**	.680**	.637**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	362	362	362	362	362	362

Source: Field Survey (2020)

There was a large and positive correlation between institutional factors and individual factors [$r = .707, n=362, p < .05$]. With an increasing institutional factor and increasing individual factors. There was a moderate positive correlation between institutional factors and social factors [$r = .670, n=362, p < .05$]. There was also a moderate positive correlation between institutional factors and tax knowledge [$r = .581, n=362, p < .05$]. With an increasing institutional factor and increasing tax knowledge. Also, there was moderate positive correlation between institutional factors and tax compliance [$r = .589, n=362, p < .05$]. With an increasing institutional factor and increasing tax compliance.

Table 7 also showed a large positive correlation between individual factors and social factors [$r = .808, n=362, p < .05$]. With increasing individual factor and increasing social factors. There was also a moderate positive correlation between individual factors and tax knowledge [$r = .607, n=362, p < .05$]. There was also a moderate positive correlation between individual factors and tax compliance [$r = .686, n=362, p < .05$]. There was a strong positive correlation between social factors and tax knowledge [$r = .777, n=362, p < .05$]. Also, there was a moderate positive correlation between social factors and tax knowledge [$r = .680, n=362, p < .05$]. Finally, there was a moderate positive correlation between tax knowledge and tax compliance [$r = .637, n=362, p < .05$]. With increasing tax knowledge and increasing tax compliance.

Level of Tax Knowledge Amongst Managers of SMEs in Bolgatanga Metropolis

The first objective of the study was to analyse the level of tax knowledge amongst managers of SMEs in Bolgatanga Metropolis. In order to

achieve the objective one, descriptive statistics was used analyse the level of tax knowledge. Mean and standard deviation was used in the analysis.

Table 8 depicts the mean and standard of the various tax knowledge. The items in measuring tax knowledge were generated from Mbilla (2018). From the Table, knowledge on commissioner's provisional assessment

recorded the highest mean of 4.19. This indicates that, most of the respondents are more equipped when it comes to provisional assessment by the commissioner. A standard deviation of .946 was reported, which is less than 1. Tax knowledge on interest received from resident banks was the next highest mean of 4.14. This also had a standard deviation of .872. Due to the regular filing of returns to GRA, it is usual that owners or managers of SMEs have knowledge on deductible expenses and non-deductible expenses. The next thing that registered the next highest average of 4.10 with a standard deviation of .874 was knowledge of capital expenditure. Knowledge on declaration of actual profit/income earned from all source to GRA recorded the next highest mean of 4.07. Knowledge on declaration had a corresponding standard deviation of .962.

Tax knowledge on partners and sole trader's entitlement to personal tax reliefs was the next item. It recorded an average of 4.07 with a standard deviation of .988. Tax knowledge on the addition of bonus and overtime to basic salary was the following item with highest mean. It had a mean of 4.02 with a corresponding standard deviation of .951 which less than 1.

The next item which recorded the highest average is the knowledge on the exclusion of accommodation provided by an employer to an employee in the computation of taxable income. This had an average of 3.99 with a

corresponding standard deviation of .983. Knowledge on the exclusion of dividend received was the following item with highest average. This recorded an average of 3.99 with a corresponding standard deviation of .908. Knowledge on depreciation as a non-deductible expense was the following item with highest average. This recorded a mean of 3.98 with a standard deviation 1.055. Knowledge on penalty on failure to furnish a return was the next item with the highest mean. It recorded an average of 3.95 with a corresponding standard deviation of .993. Finally, knowledge on tax exemptions on agro-process companies recorded the next highest mean with 3.90 and a standard deviation of 1.022. Finally, knowledge on capital allowance was least item that recorded the lowest mean of 3.89 with a standard deviation of 1.029.

Table 8: Level of Tax Knowledge

	Mean	Std. Deviation
The provisional appraisal of the Commissioner can be objected to if he is disappointed within 9 months after the start of the basic term.	4.19	.946
In taxable revenue, interest earned from a citizen bank must be omitted.	4.14	.872
Non-allowable deductible costs are capital investments	4.10	.874
To record and register real income/profit obtained from all GRA sources	4.07	.962
Partners and sole dealers are entitled to the applicable personal tax relief	4.07	.988
Bonuses are not applied to the basic income of a person and taxed using a phased tax table over time.	4.02	.951
Accommodation given to an employee by a company must be exempt from taxable wages.	3.99	.983
The dividend earned must be removed from taxable revenue because it suffers from tax withholding.	3.99	.908
Depreciation is an investment that is not deductible.	3.98	1.055
Disappointment to have a return draws one punishment unit and one-half punishment unit on an venture and the self-employed, individually.	3.95	.993
Agro-process businesses are entitled after three (3) years of exemption to any further benefits.	3.90	1.022
Capital allowances are not immediately granted to all firms.	3.89	1.029

Source: Field Survey (2020)

The findings from this study correspond to the results of Mbilla (2018) who studied on the factors affecting tax compliance. Knowledge on commissioner’s provisional assessment was the item with the highest mean. However, knowledge on depreciation as a non-deductible expense was the item with the least average.

Factors Perceived to be Affecting Tax Compliance of SMEs

The second objective of the study was to analyse the factors affecting tax compliance of SMEs. Four factors (economic factors, individual factors, institutional factors, social factors) were used in the analysis in order to reach objective two, since related factors were included in separate studies that were examined by Mbilla (2018).

Table 9: Impact of Determinants of Tax Compliance on Tax Compliance

Determinants of Tax Compliance	Coefficient	Standard Error	t-statistics	Standardized Coefficients
Intercept	1.627	.144	11.263	
Economic Factors	.087	.085	1.022	.101
Institutional Factors	.102	.046	2.228	.126
Individual Factors	.188	.049	3.870	.289
Social Factors	.239	.070	3.431	.272
R-Squared	.527			
Adjusted R Squared	.522			
Standard Error	.59303			
Durbin Watson	1.545			

Source: Field Survey (2020)

Table 9 “shows the regression results of the impact of determinants of tax compliance and tax compliance. The model indicates that 52.20 percent of the differences in tax compliance are explained by independent variables: economic factors, social factors, individual factors and institutional factors.

That's the factors considered to influence tax compliance under the study clarified 52 percent of the variations. The remaining 47.8 percent were clarified by other variables that were not taken into consideration in the analysis. The Durbin Watson (DW) proved that there was no autocorrelation in order to diagnose the model. The Durbin Watson calculation was 1.545, which comes within the range of 1.5 to 2.5" recommended.

The variables or constructs which are important in influencing the dependent variable, tax compliance, are shown in Table 9. The findings revealed that at the 5 percent significant level, the intercept of the model was positive and significant ($t(361)=11.263$; $p<.05$). This means that the level of tax compliance would be 1,627, even if the four factors perceived to be factors influencing tax compliance do not impact it. Economic factor had a positive influence on tax compliance but it was statistically insignificant ($t(361)=1.022$; $p>.05$). Institutional factor had a positive and significant impact on tax compliance. Institutional factor was significant at 5 percent significant level ($t(361)=2.228$; $p<.05$). A unit increase in institutional factor will lead to .102 increments in tax compliance. Institutional factor was the third factor that had a high influence on tax compliance. Individual factor which happened to be the third factor affecting tax compliance had a positive and significant impact of tax compliance ($t(361)=3.870$; $p<.05$). The factor with the highest impact on tax compliance (with uniform coefficients = .289) was the individual factor. A unit increase in the individual factor will lead to a tax compliance increase of .118. It has a positive and significant effect on tax compliance with social variables ($t(361)=3.870$; $p<.05$).” A unit social factor rise would lead to a tax compliance increase of .239.

Interactions between Tax Knowledge and Tax Compliance

The third objective of the study was to analyse the interaction between tax knowledge and tax compliance. In order to achieve this objective, tax knowledge was regressed on tax compliance. Control variables including gender, age, educational levels and sector operations was also added to the regression model.

Table 10: Model Summary

Independent Variable	Coefficient	Standard Error	t-statistics	Standardized Coefficients
Intercept	.160	.261	.612	
Gender	.759	.049	15.587	.625
Age	.048	.069	.695	.028
Educational Levels	.030	.023	1.320	.053
Sector Operations	.171	.043	3.936	.158
R-Squared	.440			
Adjusted R Squared	.432			
Standard Error	.64613			
Durbin Watson	1.939			

Source: Field Survey (2020)

The model summary of the relationship between the variables influencing tax knowledge and tax compliance as shown in Table 10. The summary suggests that 43.20 percent of the differences in tax compliance are clarified by independent variables. The remaining 56.8 percent is clarified by other variables that were not taken into consideration in the analysis. The Durbin Watson (DW) showed that there was no autocorrelation in order to diagnose the construct. The estimate for Durbin Watson was 1.939 and fell below the recommended range of 1.5 to 2.5.

Table 10 “shows the results of the coefficients from the regression analysis. From the table, the intercept had a positive but insignificant impact on tax compliance ($t(361)=.612$; $p>0.05$). That is, the coefficient of the intercept was zero. Tax knowledge, which happens to be the key independent variable of the study had a positive and significant impact on tax compliance.

There was a 1 percent significant level of the impact of tax knowledge on tax compliance. Out of the five independent variables which was regressed on the tax compliance, tax knowledge had the highest impact on tax compliance (with a standardized coefficient of .625). A unit increase in tax knowledge will lead to an increase of .759 in tax compliance. This confirms to the study by Palil (2010) who studied on determinants of tax compliance in self-assessment system in Malaysia.” The study showed that, pay payers being equipped on the tax rate they need to pay, where to pay and even how the government utilizes the amount paid are key factors that influences tax compliance.

Out of the four variables used as control variables, “only educational level had a significant and positive impact on tax compliance. The higher the educational level of tax payers, the higher they are likely to comply to tax payment. As the individual’s level of education increases by a unit, their level of tax compliance also increases by .171. This had the second highest impact on tax compliance. Gender, Age and Sector of operations were all positive and insignificant impact on tax compliance. This means that, the coefficient of gender (.048), age (.030), and sector operations” (.057) were zero.

Discussion of Results

Economic factor had a positive influence on tax compliance but it was statistically insignificant. This means that, individuals complying to tax or

taking decision to pay tax doesn't depend on economic factors such as the amount charged as tax rate, the idea of judicious utilization of tax rate and other factors. This confirms the study by Murphy (2014) who concluded that, tax rate does not influence tax compliance since

Also, Institutional factor had a positive and significant impact on tax compliance. Institutional factor was significant at 5 percent significant level. Effective and efficient measures put in place by institutional bodies plays a key role in tax compliance. This result is in line with Mukasa (2011) who attributed tax compliance to factors such simplicity in filing of return, behaviour and efficiency of tax authorities as well as effective administrative system which was institutional factors under this study.

Individual factor which happened to be the third factor affecting tax compliance had a positive and significant impact of tax compliance. Individual factor was the factor that had a highest impact on tax compliance. A unit increase in individual factor will lead to a .118 increase in tax compliance.

For social factors, it had a positive and significant impact on tax compliance. A unit increase in social factor will lead to a .239 increase in tax compliance. Social factor had the second highest impact on tax compliance with standardized coefficient of .272. This indicates that, the social characteristics of individuals including the ethical consideration attached to payment of taxes, attitude of owners of SMEs, and beliefs of these individual influences their decision on whether to pay tax or not. This confirms to the study by Naporow (2015)'s study on promoting income compliance among the self-employed in the Tamale Metropolis of Ghana. The study found out individual characteristics including ethics, believes and wishes have a

significant influence on compliance to tax. This was not in the case of Oppong (2015) who attributed the payment of tax to other factors aside social factors.

Social factor had the second highest impact on tax compliance with standardized coefficient of .272. This indicates that, the social characteristics of individuals including the ethical consideration attached to payment of taxes, attitude of owners of SMEs, and beliefs of these individual influences their decision on whether to pay tax or not. This confirms to the study by Naporow (2015)'s study on promoting income compliance among the self-employed in the Tamale Metropolis of Ghana. The study found out individual characteristics including ethics, believes and wishes have a significant influence on compliance to tax. This was not in the case of Oppong (2015) who suggested that ethics and believes has not influence on the payment of tax and by extension, tax compliance.

Chapter Summary

The chapter analysed and discussed study results. First, we analysed the tax knowledge of SMEs in Bolgatanga. Second, analyse tax compliance factors. Third, the study assessed the impact of tax knowledge on tax compliance. The chapter began with respondent demographics. First, the study's various constructs were correlated. First, descriptive statistics were used to determine the mean and standard deviation. Two and three objectives were analysed using regression.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This is the last chapter of the study. This Chapter present the summary of the key findings and provide conclusions based on those key finding. Based on the conclusions made, the study provides policy implications and recommendations are discussed in this chapter. For further research, the chapter also includes suggestions.

The Bolgatanga Metropolitan Assembly studied tax compliance concerns. The three goals were set to achieve the analysis' goal. The initial goal was to assess tax awareness among SMEs owners and managers in Bolgatanga Metropolitan Assembly. The study's second goal was to examine real tax compliance elements. Concerning this goal, four variables were examined. The elements studied were economic, social, individual, and institutional. The study's end goal was to examine the relationship between tax knowledge and tax compliance. The study focused on rational action and fiscal psychology. The explanatory study design was adopted since the research investigated the interplay of factors. A questionnaire was used to collect data. The study used quantitative analysis. 362 respondents were chosen using cluster sampling. Analysed via descriptive statistics and multiple regression.

For the aim, descriptive statistics were used. The variables' mean and standard deviation were calculated.

Summary of Key Findings

The results revealed that SMEs in Bolgatanga had the greatest mean awareness of commissioner's provisional evaluation. The second area where

SMEs owners were well-versed was taxation of interest collected from resident banks. The next highest mean was capital expenditure knowledge. Then came the understanding of declaring real profit/income to GRA. Next, proprietors were well-versed on personal tax reliefs for partners and single traders. The second highest mean was tax knowledge on bonus and overtime pay. The next item with the greatest average is awareness of the exclusion of employer-provided lodging from taxable income. The omission of dividend knowledge was the second highest average. The average knowledge of depreciation as a non-deductible expenditure was next. The penalty for failing to file a return was the next highest mean. The second greatest mean was tax breaks for agro-processing industries. Finally, capital allowance knowledge was the component with the lowest mean. This shows owners lack expertise on capital allowance concerns.

The study's second goal was to analyse the factors impacting tax compliance. We analysed economic, societal, institutional, and individual aspects. The results revealed that economic factors influenced tax compliance positively but not statistically. The institutional element influenced tax compliance positively. The third element determining tax compliance, individual factor, likewise had a favourable and large influence on tax compliance. The individual element had the greatest influence on tax compliance. Finally, social variables influenced tax compliance positively. The social aspect had the second largest influence.

The study's third goal was to assess the influence of tax knowledge on tax compliance. Tax knowledge influenced tax compliance positively. Tax knowledge has a 1% significant influence on tax compliance. The study found

that knowing the tax rate, where to pay, and how the government uses the money paid are critical variables that impact tax compliance. Only one of the four control variables, educational level, had a substantial influence on tax compliance. The more educated a taxpayer is, the more likely they are to pay taxes. Gender, age, and industry had a favourable and little influence on tax compliance. Gender (.048), age (.030), and sector activities (.057) were all zero.

Conclusion

The following conclusions were made based on the key findings and their practical implication:

With objective one, the study concludes that, level of tax knowledge tax payers is said to be very high. Their knowledge on deductible expenses, commissioners' activities as well as chargeables income was more than average.

Furthermore, it can be concluded from objective two that economic factors in the Bolgatanga Metropolitan Assembly, such as tax rate, audit tourists, government use of tax revenue, do not affect tax compliance among self-employed individuals. Managers and owners of SMEs do not see that rate of taxation, government use of revenue prevent people from complying with tax obligation at Bolgatanga Metropolis. Individual factors such as knowledge of tax avoidance, fines, duty to commit crimes and legal battles also influence the self-employed to comply with tax obligations in the metropolitan assembly. Individual drivers of tax compliance are the strongest drivers of tax compliance among the SMEs owners and managers in the metropolis. The findings suggest that social influences such as ethics, beliefs, behaviours,

wealth perception, government policy and a sense of personal responsibility are driving SME owners to comply with their tax obligations.

Lastly, in Bolgatanga Metropolitan Assembly in Ghana, institutional factors such as voluntary tax filing systems, simplicity of the filing process, transparency and less complexity are important for influencing tax compliance among SME owners.

Recommendations

The research suggests that the government eliminate any bottlenecks in tax administration operations. Eliminating unnecessary bureaucratic procedures will need several practises and activities. This might be accomplished in conjunction with telecommunications services, such as (Mobile money platforms), via which self-employed individuals can simply file their tax returns. This advice is based on the finding that institutional variables have a significant impact on tax compliance in the district.

The study also recommends that society's leaders, opinion leaders, civic and religious leaders educate and encourage members (citizens) about the need of being accountable by filing tax returns routinely and accurately. Festivals and social activities should serve as venues for education, knowledge, and advocacy for participants to be socially conscientious. Based on the findings that social variables in the Bolgatanga Metropolitan Assembly of Ghana have a significant impact on tax compliance among self-employed persons, this recommendation is made. To be socially responsible, individuals must build personal motivation by quickly filing and paying taxes.

In terms of formulating tax policy, the government should not emphasise the characteristics of respondents. Individual characteristics, such

as age, degree of education, and field of endeavour, do not influence the tax compliance of the self-employed since they have no significant impact on tax compliance.

Suggestions for Further Research

This study concentrated on factors affecting tax compliance. The aims of this studied was achieved by using quantitative data. Further research can consider the use of qualitative data since this will give the exact feelings on what causes these people to default tax.



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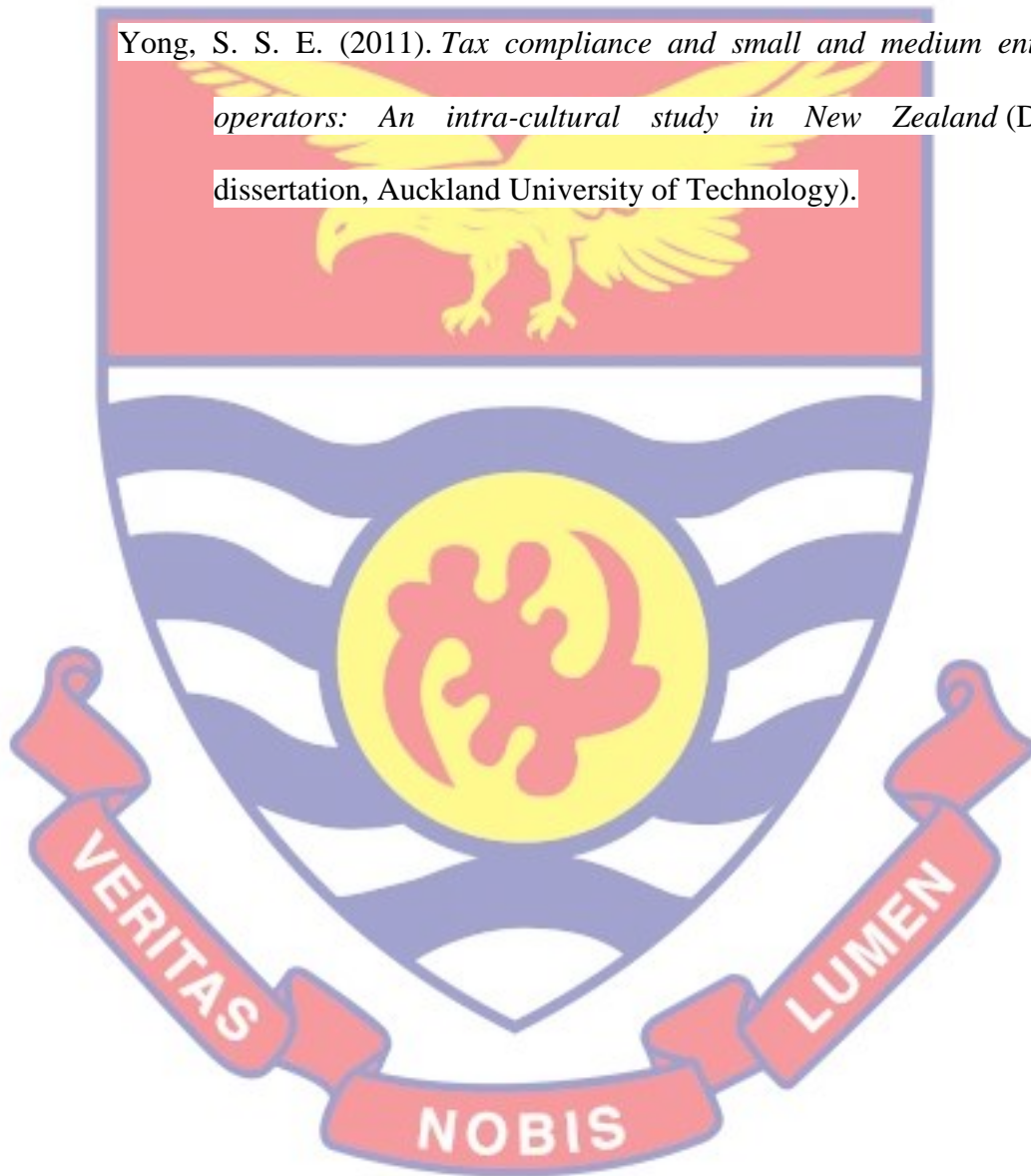
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APPENDICES

APPENDIX

RESEARCH QUESTIONNAIRE

Please write or tick [√] where applicable

SECTION A: DEMOGRAPHIC INFORMATION OF RESPONDENTS



1. Sex distribution Male [] Female []

2. Age range of respondents in years:
18-24 [] 25-34 [] 35-44 [] 55-65 [] 65-above []

3. Educational level:
Non formal [] Primary Education [] Secondary Education []
University []

4. Which Sector of the Ghanaian do you operate? (years)
Service [] Manufacturing [] Agric and Agric-business []
Other works []

5. Which regulatory authority are you registered with in your locality (Ghana)?
GRA [] RGD [] NBSSI/AGI [] Other.....

SECTION B: DETERMINANTS OF TAX COMPLIANCE

6. To what extent do you **AGREE** with the following statement of Tax compliance at Bolgatanga Metropolitan

1-Least Agree; 2- Disagree; 3-Neutral; 4- Agree; 5-Strogly Agree

	1	2	3	4	5
Determinants of Tax Compliance					
Economic Factors					
"I consent to my expense commitments on the grounds that the duty rates are "alright" for me to pay"					
"I complete and document my government form consistently on the grounds that charge examiners visit me to check my assessment forms"					
"I consent to my assessment commitments since government spend the duty income prudently"					
"I record my expense forms since I get profits by government"					
"Duty rate is straightforward so I generally record my expense forms to burden specialists"					
Institutional Factor:					
"I record and pay my government form since charge specialists make it willful for me to document"					
"My assessment forms are constantly recorded on the grounds that it is straightforward for me to document the government forms"					
"The managerial framework is straightforward for me document my government forms at the duty office"					
"I document my assessment form on the grounds that is it simple for charge specialists to distinguish defaulters"					

"I record my assessment forms in light of the fact that there is no complexity and shrouded data during the time spent filling my government form"					
Individual Factors					
"I record and pay my duty since I run my funds well so I can pay"					
"I am mindful of the offenses so I generally follow my duty commitment"					
"Defaulting charge commitment has serious punishments so I generally agree to my duty commitment"					
"I don't need my business to experience the ill effects of fights in court so I generally record my assessment form"					
"As an entrepreneur I feel that documenting my government form will help my business picture"					
Social Factors					
"I record my assessment forms since it is moral to document my expense forms consistently"					
"I record my expense form since it is impartial and reasonable for contribute my quantity to public turn of events"					
"Changes on current government strategy permits me to record my expense forms without any problem."					
"It is my disposition as a money manager to document my expense forms"					
"As a feature of a business bunch it is my commitment to consistently record my government form"					

SECTION C – TAX KNOWLEDGE

This section comprises measures the level of tax knowledge of respondents.

“Please read each statement carefully and answer (tick) according to your knowledge.”

“For each question in this part, please tick: The following are my

responsibilities and rights as taxpayers”

	Not do	Slightly do	Moderately do	Highly do	Extremely do
“Commissioner’s provisional assessment may be objected if feel dissatisfied within 9 months after the commencement of the basis period”					
“To inform and declare actual profit/ income earned from all source of the GRA”					
"Reward and over the long run isn't added to an individual's fundamental compensation and burdened utilizing graduated assessment table"					
"Convenience gave by a business to a worker should be rejected in available pay"					

"Profit got should be rejected in available pay since it endures retaining charge"					
"Premium got from an occupant bank should be barred in available pay"					
"Devaluation is a non – deductible costs"					
"Capital uses are non-permissible deductible costs"					
"Capital remittance isn't allowed consequently to all organizations"					
"Accomplices and Sole brokers are qualified for individual expense reliefs accessible"					
"Agro-measure organizations are qualified for any extra impetuses following three (3) a long time exclusion"					
"Failure to furnish a return attracts one penalty unit and half penalty unit on a company and self-employed respectively"					

"Failure to pay tax on due date not more than three (3) months attracts 10% of the tax debt plus the tax debt"								
--	--	--	--	--	--	--	--	--

SECTION D: TAX COMPLIANCE

To what extent do you agree that of tax compliance influences you to comply with tax obligation?

Where 1-Least Disagree; 2- Disagree; 3-Neutral; 4- Agree; 5-Strogly Agree

	1	2	3	4	5
TAX COMPLIANCE					
"As a result of basic filling measure I don't have any goal to avoid filling and covering charges"					
"Government utilizes my expenses for my great so I don't aim to diminish my official assessment sum"					
"As a moral finance manager I will feel terrible on the off chance that I don't record my government form routinely at the assessment office"					
"The assessment rate is "alright" for me so I don't mean to conceal any data in my expense forms"					
"The duty is reasonable and impartial so I will document my government forms"					

APPENDIX B

Krejcie and Morgan Sample Size Determination Table

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970