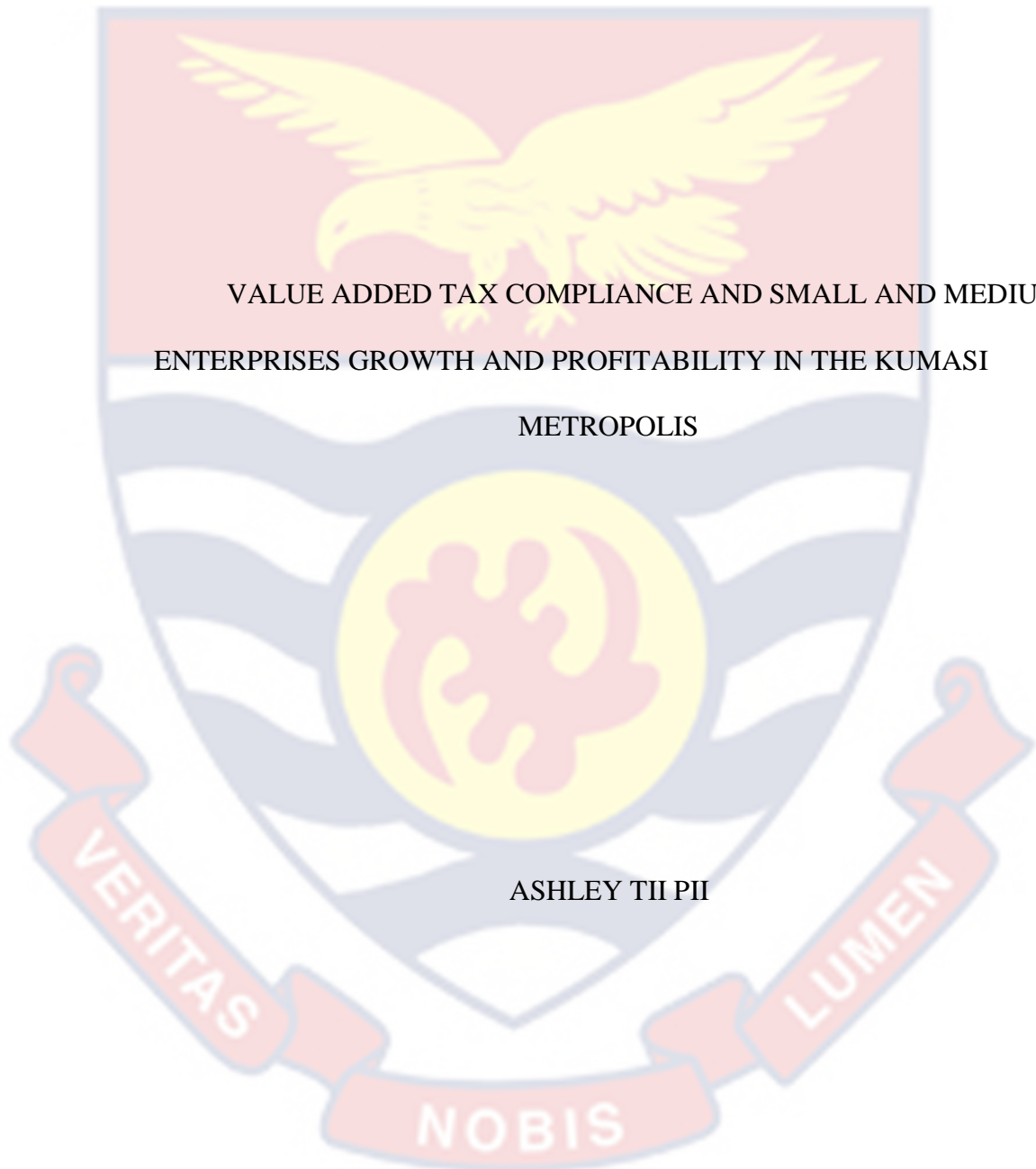UNIVERSITY OF CAPE COAST

VALUE ADDED TAX COMPLIANCE AND SMALL AND MEDIUM

ENTERPRISES GROWTH AND PROFITABILITY IN THE KUMASI

METROPOLIS

ASHLEY TII PII

2023

UNIVERSITY OF CAPE COAST

VALUE ADDED TAX COMPLIANCE AND SMALL AND MEDIUM
ENTERPRISES GROWTH AND PROFITABILITY IN THE KUMASI
METROPOLIS

BY

ASHLEY TII PII

Dissertation submitted to the Department of Accounting of the School of
Business, College of Humanities and Legal Studies, the University of Cape
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Business Administration degree in Accounting
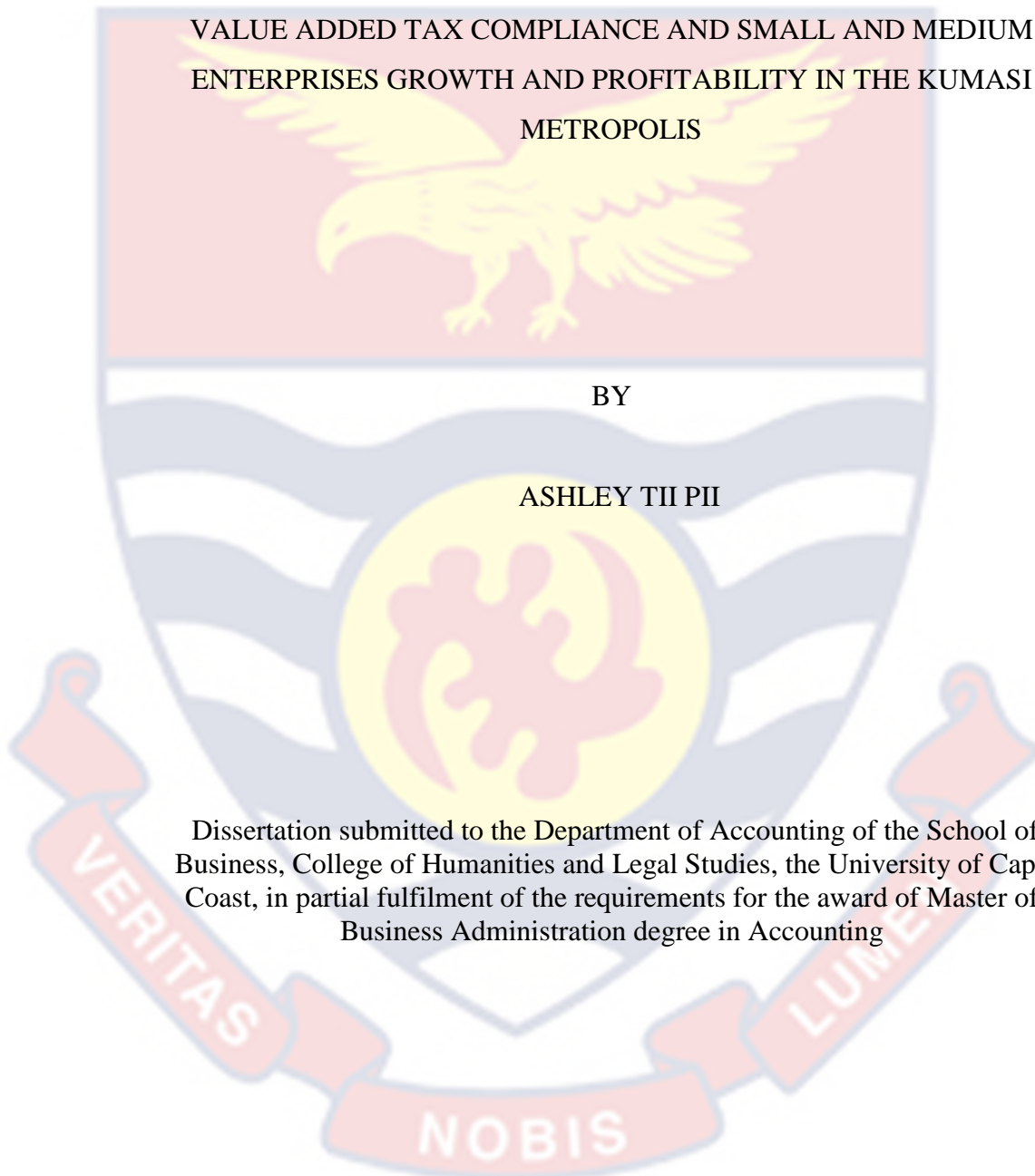
FEBRUARY 2023

DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the results of my original research and

that no part of it has been presented for another degree in this university or

elsewhere.

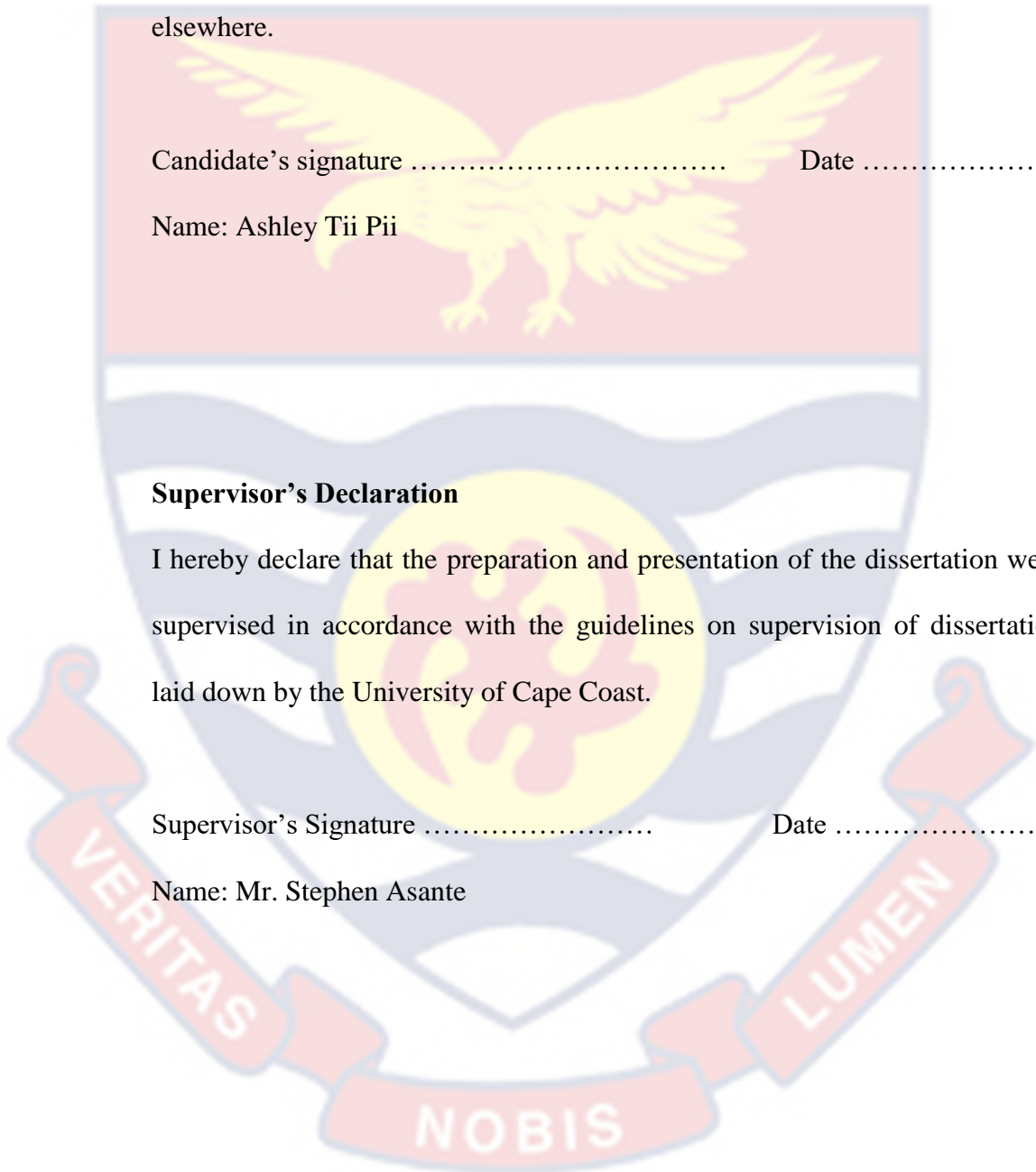Candidate's signature ……………………………   Date …………………

Name: Ashley Tii Pii

Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were

supervised in accordance with the guidelines on supervision of dissertation

laid down by the University of Cape Coast.

Supervisor's Signature ……………………   Date ……………………

Name: Mr. Stephen Asante

ABSTRACT

The study focuses on Tax knowledge and Value Added Tax compliance among Small and Medium Scale Enterprises in Ghana. Specifically, this study analyses the level of VAT Knowledge among SMEs managers/owners in the Kumasi metropolis, investigate how VAT knowledge influence VAT compliance in the Kumasi metropolis and examine how VAT compliance affect the profitability of SMEs in the metropolis. Data collected by Directorate of Research, Innovation and Consultancy (DRIC) on the topic "Ghana Beyond Aid: examining tax knowledge, Compliance cost and tax Compliance" was used for this study. The quantitative research approach which follows the positivist research philosophy was adopted. A total of 229 data points were collected from respondents in the Kumasi metropolis. An ordinary least square regression model was adopted to examine the effects. The study found that owners and managers of Small and Medium Scale Enterprises possess average tax knowledge, VAT compliance have a positive effect on Small and Medium Scale Businesses' profitability. It was further found that the level of tax knowledge has a negative effect on VAT compliance level. It is among this that this study recommended to Ghana Revenue Authority to intensify their tax education program since there is some substantial number of firm managers, owners and caretakers who have low tax knowledge. Again, small and medium scale enterprise owners, managers and caretakers are recommended to take advantage of the tax education opportunities that GRA create for them since knowing more about tax issues has the potentials of increasing their turn over as well as help them to avoid paying VAT.

KEYWORDS

Growth

Profitability

Small and medium enterprises

Tax compliance

Value added tax

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DEDICATION

To my family

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LIST OF ACRONYMS

DRIC   Directorate of Research, Innovation and Consultancy

GRA   Ghana Revenue Authority

SMEs   Small and Medium Scale Enterprises

VAT   Value Added Tax VATC VAT Compliance

CHAPTER ONE

INTRODUCTION

In the dynamic landscape of contemporary business environments, the intersection of taxation policies and the growth trajectory of Small and Medium Enterprises (SMEs) has become an increasingly vital area of study. Among the various taxation mechanisms employed by governments worldwide, Value Added Tax (VAT) holds a prominent position, acting as a crucial revenue generator while also influencing the operational landscape of businesses. This research delves into the nuanced relationship between Value Added Tax compliance and the growth and profitability of Small and Medium Enterprises within the Kumasi Metropolis. As the heartbeat of Ghana's entrepreneurial ecosystem, the Kumasi Metropolis provides a unique backdrop for understanding the challenges and opportunities faced by SMEs in navigating the intricacies of VAT regulations. By exploring the impact of VAT compliance on the operational efficiency, financial stability, and overall performance of SMEs, this study aims to contribute valuable insights to policymakers, business practitioners, and academia. As we embark on this exploration, the intricate dance between tax compliance and SME vitality unfolds, shedding light on the symbiotic relationship that shapes the economic landscape of the Kumasi Metropolis.

Background to the Study

According to Lyme and Oats (2009), the administration of the general economy in developing nations is significantly impacted by the level of taxation applied. It is common knowledge that Ghana's economic and social progress over the last several decades has been supported by the Small and

Medium Enterprises (SMEs) that have been the backbone of the country's economy. According to the Ghanaian government, they are the principal engine of economic development, the creation of new jobs, the manufacture of products and services, and the generating of money from inside the country. It is anticipated that small and medium-sized enterprises (SMEs) in Ghana would be responsible for the creation of employment opportunities for around 15.5% of the labor force (Parker, Riopelle, & Steel, 1994). As a result, SMEs have had a higher rate of labor growth in comparison to micro and large-scale corporations, which account for 5% of the workforce in Ghana. (Ghana Statistical Service, 2010) In 1998, the sector was responsible for a contribution of 6% to the GDP. Businesses that have less than a particular number of employees are considered to be small and medium-sized enterprises (SMEs). The tiny ones have between one and 10 people working for them, while the medium-sized ones have between ten and fifty people working for them.

In general, it is possible to say that the proportion of small and medium-sized enterprises (SMEs) to the private sector is larger in developing countries like Ghana. Small and medium-sized enterprises (SMEs) make up the majority of companies in Ghana. These firms employ a sizeable section of the population, which contributes to an overall improvement in the level of life of the people. On the other hand, taxes, which includes value-added tax, is another factor that contributes significantly to the growth and well-being of the economy. Like any other kind of business organization, small and medium-sized enterprises (SMEs) in Ghana are obliged to comply with the different tax systems, including the value-added tax (VAT). One of the primary responsibilities of the government is to improve the level of life of its

institutions and the people who live within its borders. This may be accomplished via the expenditure of finances and the borrowing of funds in order to provide infrastructure and to ensure the application of quality policies. Taxation (including VAT) is one of the most efficient methods by which the government of Ghana and other countries across the globe earns money. This is in addition to the loans that the government often obtains from international financial institutions and other government agencies.

In March of 1988, the value-added tax (VAT) was implemented as a replacement for the sales and service tax. The purpose of this change was to broaden the scope of the tax system and improve the effectiveness of the VAT administration in the nation. The value-added tax (VAT), which is a proportionate tax that is paid on all sales, has emerged as an important income source for the government of Ghana, which is under growing pressure to produce money in order to achieve budgetary balance. Across the globe, a value-added tax (VAT) is a consumption tax that is imposed on a product (Stamatopoulos, 2017). Value-added taxes, sometimes known as VAT, is a tax that helps generate money that may be used to pay for governmental spending. The value-added tax (VAT) is a tax system that generates income for the government; nevertheless, it is a cost to small and medium-sized enterprises (SMEs) and limits their profit level and growth, which is why SMEs are reluctant to comply with VAT. The value-added tax (VAT) is a challenging problem, particularly in nations that are still growing. Taxes are a requirement that cannot be avoided. In the same vein, the continued existence of small and medium-sized businesses have to also be taken into consideration. It is pointed out by Younus, Ahmed, Liaquat, and Malik (2021) that continual tax

education and agency are actions that the government has put in place to guarantee that tax receipts are maximized by compliance. According to Palil (2010), the self-assessment system encourages individuals to comply with their tax obligations voluntarily. In a similar manner, the Ghana Revenue Authority (GRA) needs to initiate a self-assessment program for business entities in order to strengthen the regulations that govern tax compliance (GRA, 2016).

According to Bird (2016), the formation of an enabling climate is a factor that encourages compliance from a variety of taxpayers. When it comes to tax compliance, small and medium-sized enterprises (SMEs) are dependent on the understanding of tax law possessed by their management or owners. Therefore, the purpose of this research is to analyze the factors that influence the development of smaller businesses' profitability and compliance with VAT in the Kumasi metropolitan area.

Statement of the Problem

Mobilization of tax income is an issue that is significant to every jurisdiction. There are a number of elements that contribute to a slowdown in the pace at which the government is able to collect income from taxes. In order for the state to become more developed, the small and medium-sized enterprises (SMEs) need to comply with tax regulations and policies that would create money for the state. There are many distinct methods that might be used to collect revenue from proprietors of businesses. Despite this, studies have shown that small and medium-sized enterprises (SMEs) are quite vocal about the effect that taxes have on their operations. The value-added tax is anticipated to make a substantial and favorable contribution to the

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performance of small and medium-sized enterprises (SMEs) in any economy. This, on the other hand, seems to be a significant departure from reality in Ghana. According to small and medium-sized enterprises (SMEs), the new value-added tax (VAT) rate in Ghana, which went into effect in March 2021, was 19.25%. There are various studies that demonstrate that small and medium-sized firms (SMEs) in low- and middle-income countries (LDCs) like Ghana are typically noncompliant with tax in general (Terkper, 2003; Stern & Barbour, 2007; Ayoki, 2007). This is the case despite the vast number of planned changes that are intended to enhance tax compliance.

(Stern & Barbour, 2007; Ayoki, 2007) certain researches have shown that certain small and medium-sized enterprise (SME) operators are not informed about the manner in which certain tax systems function, which results in issues with authorities and has an impact on business relationships. For this reason, small and medium-sized business owners and operators do not comply with the VAT collecting system. Small and medium-sized enterprises (SMEs) are probably not in a position to maximize their VAT claims, which leaves them vulnerable to incurring additional tax obligations. This study aimed to determine the degree to which compliance with VAT affects the development and profitability of small and medium-sized enterprises (SMEs) in the Kumasi metropolitan area.

Purpose of the Study

The purpose of this study is to investigate the effect of VAT compliance on SMEs profitability in Kumasi metropolis.

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Research Questions

The specific objective of this study intended to accomplish include the following;

1. to analyse the level of VAT Knowledge among SMEs managers/owners in the Kumasi metropolis.

2. to investigate how VAT knowledge influence VAT compliance in the Kumasi metropolis.

3. to examine the perceived factors that contribute to VAT compliance among SMEs managers/owners in the metropolis.

4. to investigate how VAT compliance affect the growth and profitability of SMEs in the metropolis.

Research Questions

The following questions were used to achieve the objective of the study;

1. What is the overall level of VAT Knowledge among SMEs managers/owners in the Kumasi metropolis?

2. What is the relationship between VAT Knowledge and VAT compliance among SMEs managers/ owners in the Kumasi metropolis?

3. What are the factors perceived to be associated with VAT compliance among SMEs in the Kumasi metropolis?

4. How does VAT compliance affect the growth and profitability of SMEs in the Kumasi metropolis?

Significance of the study

This study would be a useful addition to the existing research on tax compliance and the factors that determine it. For the purpose of making an

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educated decision regarding the value-added tax (VAT) system and its repercussions on the growth and profitability of small and medium-sized enterprises (SMEs), the findings and recommendations of this study would also be of major benefit to the government, educators, entrepreneurs, and other stakeholders. Once again, policy decisions would be made by tax officials and other leaders of the country over how to facilitate voluntary compliance with tax regulations among small and medium-sized enterprises (SMEs) in Ghana, and more specifically in Kumasi region. Tax authorities would also be able to detect the circumstances that led to VAT non-compliance with the assistance of this. The individuals in the academic community who are interested in conducting research in this field of study would be able to use it as a reference resource. Last but not least, small and medium-sized enterprises (SMEs) will reap the benefits of this in order to assist them in recognizing the moral obligations that are associated with taxes and to benefit from government support in order to expand their operations.

Delimitations of the study

While the exploration of Value Added Tax (VAT) compliance and its impact on Small and Medium Enterprises (SMEs) in the Kumasi Metropolis promises valuable insights, it is essential to establish the boundaries and limitations of this study to maintain focus and relevance.

This study is confined to the Kumasi Metropolis in Ghana. While the unique characteristics of Kumasi make it an intriguing setting, the findings may not be universally applicable to SMEs in other regions or countries with distinct economic, cultural, and regulatory contexts.

The study focuses on a specific time frame, and the data collected will be reflective of the prevailing conditions during that period. Economic and regulatory changes occurring outside this time frame may not be fully captured, potentially limiting the generalizability of findings to different temporal contexts.

The study specifically targets Small and Medium Enterprises (SMEs) based on their size categorization. Large enterprises and micro-businesses are excluded from the analysis to maintain a clear focus on the unique challenges and opportunities faced by SMEs in relation to VAT compliance.

Limitation of the study

While this research endeavors to provide valuable insights into the relationship between Value Added Tax (VAT) compliance and the growth and profitability of Small and Medium Enterprises (SMEs) in the Kumasi Metropolis, it is essential to acknowledge certain limitations that may impact the scope and generalizability of the findings.

The study's findings are contingent on the representativeness of the sample selected for analysis. If the sample is not a true reflection of the diverse SME landscape in the Kumasi Metropolis, the results may not accurately capture the broader experiences of businesses in the region.

The accuracy and reliability of the study hinge on the precision of the data collected. Potential inaccuracies in self-reported financial data or inconsistencies in tax compliance records may impact the integrity of the findings.

Organization of the study

This study would be divided into five (5) chapters. The first chapter (chapter one) was the introduction to the study which comprised the background of the study, the statement of the problem, objective, research questions, hypothesis as well as the significance, limitations and delimitation of the study. Chapter two reviewed the relevant literature considering the theoretical, conceptual and empirical reviews. Chapter three covered the research methods that would be used to investigate and gather data for the research., data collection. This included the strategies and designs used to conduct the study, as well as the populations, samples, and sampling methods used, as well as the data collection and analysis strategies. Chapter four dealt with discussion of results while chapter five summarized the main research findings, drew conclusions and made recommendations to inform decision making among policy makers and tax authorities.
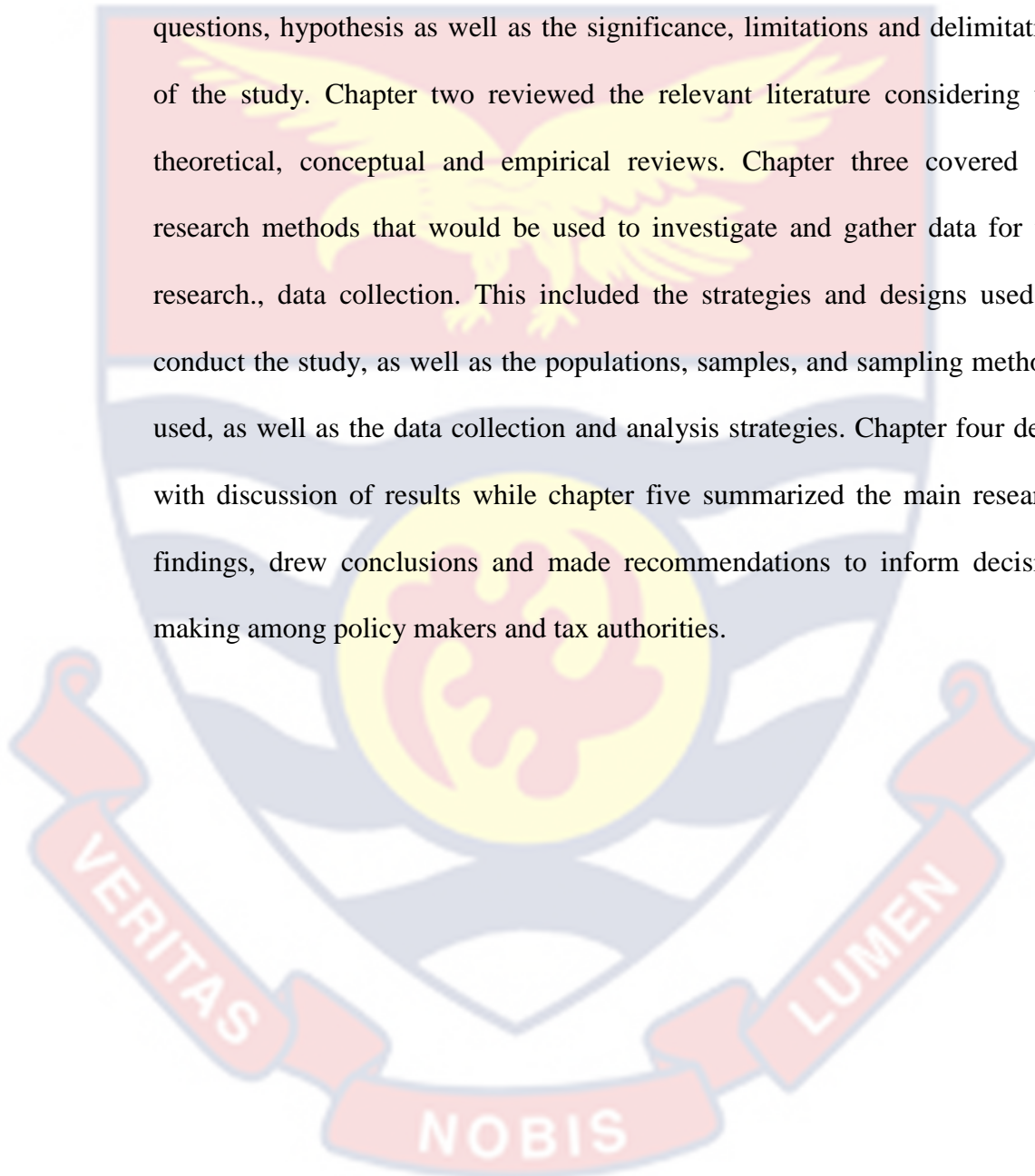
CHAPTER TWO

LITERATURE REVIEW

Introduction

The purpose of this study had been to examine VAT compliance and SME growth and profitability in the Kumasi metropolis. This chapter reviewed the relevant previous studies that are related to the purpose of this study. It began by outlining the main theories that form the basis of this study. It will be followed by conceptual and empirical review of the previous studies.

Theoretical Review

The main theories on which this study was built would be explained under this section. These are fiscal psychology theory, economic deterrence theory and ability to pay theory.

Fiscal psychology theory

Fiscal psychology theory, within the realm of behavioral economics, provides a lens through which we can understand the dynamics of tax compliance, especially in the context of Small and Medium Enterprises (SMEs) and their growth and profitability in the Kumasi Metropolis. This theory posits that individual and organizational behavior in taxation is influenced not only by economic factors but also by psychological and social factors. Applying fiscal psychology to the topic of Value Added Tax (VAT) compliance and SMEs in Kumasi involves considering how cognitive, emotional, and social aspects impact businesses' responses to tax obligations.

Fiscal psychology theory suggests that the perceived fairness of tax policies can significantly influence compliance behavior. If SMEs in Kumasi perceive VAT regulations as fair and equitable, they may be more inclined to

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comply willingly. Conversely, if there is a perception of unfairness, it may lead to resistance and attempts to evade taxes.

The level of trust that SMEs in Kumasi have in the government and its ability to use tax revenues efficiently plays a crucial role. Higher trust may foster compliance, as businesses believe their contributions will be used for public goods and services that benefit society, contributing to a conducive business environment.

Fiscal psychology underscores the importance of effective communication and education about tax policies. SMEs in Kumasi may comply more readily if they understand the purpose of VAT, its benefits, and the consequences of non-compliance. Misunderstandings or lack of awareness may lead to inadvertent non-compliance.

The theory suggests that social norms and peer influence can shape tax compliance behavior. If compliance is seen as a norm within the business community in Kumasi, SMEs may be more likely to conform to these expectations. Conversely, if tax evasion is prevalent, businesses may follow suit. Fiscal psychology acknowledges that individuals and businesses weigh the psychological costs and benefits of compliance. For SMEs in Kumasi, the perceived hassle or stress associated with compliance may impact their willingness to adhere to VAT regulations. In contrast, potential benefits, such as a positive image or access to government services, may motivate compliance.

The theory recognizes that the effectiveness of enforcement and deterrence mechanisms influences compliance behavior. For SMEs in Kumasi, the perceived likelihood of detection and the severity of penalties for non-

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compliance can impact their decision-making regarding VAT compliance. By applying fiscal psychology theory to the study of VAT compliance and SME growth and profitability in the Kumasi Metropolis, researchers can gain a deeper understanding of the psychological drivers that influence businesses' tax-related behaviors. Recognizing the interplay between economic incentives and psychological factors is essential for designing effective policies that encourage voluntary compliance and foster a positive relationship between SMEs and taxation authorities.

Economic deterrence theory

The Economic Deterrence Theory provides insights into the dynamics of tax compliance by emphasizing the role of economic factors, particularly the perceived costs and benefits associated with compliance or non-compliance. In the context of the topic "Value Added Tax (VAT) Compliance and Small and Medium Enterprises (SMEs) Growth and Profitability in the Kumasi Metropolis," Economic Deterrence Theory sheds light on how SMEs make decisions regarding tax compliance based on rational calculations of costs and benefits.

Economic Deterrence Theory suggests that businesses weigh the perceived costs of compliance when deciding whether to adhere to tax regulations. For SMEs in Kumasi, these costs may include the financial expenses related to proper record-keeping, additional administrative burdens, and the cost of professional assistance for tax preparation.

On the flip side, the theory highlights that businesses also consider the perceived benefits of compliance. In the context of VAT, SMEs in Kumasi may anticipate advantages such as maintaining a positive relationship with tax

authorities, avoiding legal repercussions, and gaining access to government incentives or support programs. Economic Deterrence Theory emphasizes that the perceived costs of non-compliance, such as penalties, fines, and potential legal actions, play a significant role in shaping compliance behavior. SMEs in Kumasi are likely to evaluate the potential financial and reputational consequences of failing to comply with VAT regulations.

Additionally, businesses may consider the perceived benefits of non-compliance, such as short-term financial gains from evading taxes. However, the theory suggests that effective deterrence measures would aim to minimize the attractiveness of these benefits, making compliance the more rational choice. Economic Deterrence Theory underscores the importance of enforcement and deterrence measures in shaping compliance behavior. In the context of VAT compliance in Kumasi, the effectiveness of auditing, monitoring, and penalties will influence SMEs' decisions. Strong deterrence mechanisms may act as a deterrent, discouraging non-compliance.

The theory posits that the perceived probability of detection is a crucial factor. If SMEs in Kumasi believe that tax authorities are highly likely to identify instances of non-compliance, it could influence their decisions to comply with VAT regulations. Economic Deterrence Theory recognizes that businesses assess risks associated with both compliance and non-compliance. The perceived level of risk, including the likelihood of facing negative consequences, may shape SMEs' choices in navigating VAT compliance in Kumasi.

Conceptual Review

The conceptual framework of this study proposes that SMEs VAT compliance and Growth and profitability as the two main independent variables having either a positive or adverse effect on compliance to taxes. The main related concepts that this study reviewed include: SMEs Perception, VAT compliance and SMEs growth and profitability in Kumasi metropolis.

Concept of VAT

Value-added tax, or VAT, is a tax charged based on the value added to a product or service by the final retailer (Radhakrisanan, 2018). For the purpose of broadening the government's tax net and subsequently raising tax revenue, Ghana implemented value-added tax in 1998. Under the Value Added Tax Act of 2013, the Ghana Revenue Authority (GRA) is responsible for collecting and remitting VAT. Sales of goods and services at every stage of production and distribution are subject to the Value Added Tax, an indirect consumption tax. A VAT registered taxpayer's role is that of an agent, collecting and remitting VAT on behalf of the government. Taxpayers can offset their output Vat declarations with the Vat they have already paid on inputs. Suppliers of exempt goods and services do not levy Vat on their suppliers and cannot declare credit for Vat paid on their consumptions. There are some services and products that are not taxed under the Vat system. Business owners can claim the input tax they have paid on zero-rated products and services as a deduction from the Vat they charge their customers.

Factors Influencing VAT Compliance

In this section, we will examine the variables that affect taxpayers' willingness to comply with Value Added Tax regulations.

Tax Understanding and Taxpayer Knowledge

This unit discusses the major significance that tax knowledge and tax awareness play, particularly in determining the level of compliance that taxpayers have with regard to taxation. An examination of the literature from earlier studies, a variety of research approaches, a number of variables, and observations would be included in this section. It is essential to have a certain level of information regarding taxes in order to comprehend the realities of taxation and the attitudes that citizens have regarding taxation (Wahabu, 2017). There is a significant relationship between the level of education and the decision to avoid taxes or not. The management of tax systems ought to be uncomplicated, and the vast majority of taxpayers ought to have little trouble understanding the fundamental ideas of taxation. According to Olaoye and Ogundipe (2018), having knowledge of taxes makes it easier for a taxpayer to either recognize and comply with legal requirements for taxes or to choose not to comply with those laws. The degree of general tax knowledge can be improved by education, which can help to the development of tax compliance. This is because there are higher expectations regarding taxes. According to Mukasa (2011), increasing one's knowledge of the possibilities for tax avoidance has a negative impact on tax compliance since it encourages individuals to violate all of the laws and regulations pertaining to taxes.

In order for a tax system to be functional, it must be able to prevent the introduction of new tax rates that are not truly necessary and should also simplify the tax terminology that is utilized by all of the parties involved. There should be no difficulty in understanding the meaning of these terminology for regular taxpayers. When it comes to things pertaining to taxes,

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having a good handle on them requires having a thorough understanding of the tax system, being knowledgeable with the applicable requirements, and being aware of where to acquire important tax information. Activities that are targeted at educating taxpayers are designed to improve taxpayers' knowledge of the tax system and to give taxpayers with more agency in satisfying their tax responsibilities. In a similar manner, Amah and Nwaiwu (2018) divided tax knowledge into two distinct aspects: knowledge that is seeking a path through formal schooling, and knowledge that is directly targeted at prospective possibilities to avoid paying taxes.

According to Azmi, Zainuddin, Mustapha, and Nawi (2016), the general knowledge that taxpayers acquire is a significant aspect that contributes to the overall view of tax rules and regulations across the board. According to Williams and Krasniqi (2017), various researchers have investigated the impact that tax education has on tax evasion. These researchers investigated the influence of tax education on tax evasion by utilizing the general level of education of taxpayers as an alternative to evaluate the attitude towards tax evasion. Wahabu (2017) proposes that as the population of taxpayers becomes more educated, the regulations governing taxes would become more stringent. Taxpayers' total tax literacy has been demonstrated to have a substantial correlation with their potential to recognize tax laws and regulations as well as their ability to comply with them, according to research that was conducted in the past (Amah & Nwaiwu, 2018).

Taking into consideration the evidence that tax knowledge influences the comprehension of taxpayers, an obvious question that has been raised by

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previous researchers (Alshira'h & AbdulJabbar, 2019; Ahmed & Kedir, 2015; Belay & Viswanadham, 2016) is whether or not increasing the awareness of taxpayers would improve the degree of tax compliance. By demonstrating that there is a significant positive correlation between the level of information that taxpayers have regarding taxes and their compliance with tax laws, the prevailing outcome was proven. Taking into account the optimistic relationship, it can be stated that the level of compliance typically rises in tandem with the level of tax knowledge. The findings of this study are in line with those of a previous investigation that Palil (2010) conducted. Tax knowledge has a significant impact on the degree to which individuals comply with their tax obligations, according to Palil (2010), who presented a similar finding that utilized both indirect and theories.

Palil's analysis was divided into two primary components for easier comprehension. For the first part of the analysis, the focus was on the degree of tax compliance and the level of knowledge regarding taxes. The second part of the analysis focused on the factors that determine tax compliance. For the purpose of the study, the questionnaires were distributed to the persons who participated in the study through the use of email. There were a total of 5,500 people selected using a random process. The use of quantitative methods was the only approach taken in the analysis. On the basis of the following, tax knowledge was evaluated: (i) the obligations and rights of taxpayers; (ii) the knowledge of job income; (iii) the knowledge of dividends and interest; (iv) the knowledge of discounts; (v) the knowledge of discounts; and (vi) the recognition of violations, penalties, and fines. Across the association between amount of understanding of tax and level of compliance to tax rules, the study

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discovered that experience with child relief duties and rebates tends to be substantially connected with tax compliance. This connection was found to exist across the board.

A logical linear association was found between the level of understanding of tax and the level of conformity to tax rules, as indicated by the calculated correlation factor (r = 0.36). In addition, the approximate determination coefficient, RSquare, was thirteen percent, which may indicate that the variation in tax knowledge was clarified by thirteen percent of the variable in the level of tax compliance. As a result of this beneficial correlation, it can be deduced that individuals who pay taxes and have a substantial understanding of tax rules are more likely to comply with tax laws in comparison to individuals who have more restricted knowledge of tax laws.

The results that Loo and Ho (2018) obtained were not in agreement with those that Palil (2010) obtained. Their investigation was centered on Malaysia. There were 250 questionnaires distributed. Within the context of a self-assessment methodology, the researchers made the decision to investigate paid individual competencies in the years prior to 2018, as well as in the years following 2019. The information about taxes was reviewed in respect to taxable income, deductions, tax breaks, tax refunds, and tax credits so that they could conduct their analysis. Their tax expertise in respect to personal taxes was considered to be quite inadequate, rendering them incompetent and unable to practice acceptable amenability, according to the findings of the research. This was despite the fact that the respondents had acquired higher education.

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According to Eriksen and Fallan (2019), the most relevant factor in determining tax preferences and attitudes is the individual's level of experience with the tax legislation. The scope of their investigation was broken down into three primary aspects. To begin, consider the research that was conducted based on the comprehension and perspective of individuals who pay taxes. The second objective of the study was to investigate the cumulative effect of tax perception on tax compliance behaviors. Finally, the evaluation focused on the influence that tax agents have on the behavioral decisions that taxpayers make. The findings of the study indicate that people's perceptions of taxes have a positive relationship with their sense of justice, their moral obligations about taxes, and their behavior toward the avoidance of tax payment.

Eriksen and Fallan (2019) discovered that the habit of paying taxes can be strengthened by better tax recognition, which in turn increases compliance and decreases the tendency to avoid taxes because of the increased likelihood of paying taxes. A study was published by Collins, Million, and Toy (2019) that detailed the results of a random mail survey that was carried out in the United States and sampled 700 houses using information obtained from phone books. They found that out of the 220 answers that were available, tax awareness and the degree of education had an adverse relationship to tax law. To summarize, when taking into consideration the results of the vast majority of previous studies, it is evident that increasing the level of awareness among taxpayers, particularly among taxpayers who fall into the category of small and medium-sized taxpayers, is an essential component in the establishment of an effective tax system. It is imperative that taxpayers have a comprehensive

understanding of tax-related matters and be well-informed in order for the government to achieve its income target.

Due to the fact that educated taxpayers have a better understanding of the tax system, they are more likely to have favorable views, which in turn promotes tax compliance. Noncompliance options may be readily available to educated taxpayers. The argument that the level of tax knowledge of taxpayers has an effect on the level of compliance that they exhibit is supported by a number of studies.

Cost of Tax (VAT) Compliance

The costs that taxpayers incur in order to fulfill their legal tax duties are referred to as "tax compliance costs" (Klun & Blažić 2005). The cost of tax compliance encompasses a wide range of expenses, including the cost of collecting taxes and the cost of submitting tax returns, as well as the cost of wages and compensation for employees and specialists, as well as the cost of acquiring new information and maintaining the system's accuracy.

Taxpayers commonly rely on tax professionals who, by employing evasive strategies, reduce the amount of taxes that they are required to pay (Franzoni, 2000). In order to mitigate the adverse effect that high tax compliance costs have on the desirability of a nation, the Government of the Republic of China (GRA) has devised strategies for simplifying tax systems, such as the tax system, in order to reduce the requirements placed on tax professionals. This leads to a greater degree of willing compliance. One can attach a variety of interpretations to the term "compliance costs." One can divide the costs into three categories: time, money, and mental health. These are the three categories that can be chosen. It is also important to take into

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account the hourly expenditures that are connected with guaranteeing accurate tax filing and payment.

Salary and fee payments made to external tax specialists and other personnel are included in the category of cash expenditures. One of the psychological costs that may be incurred as a result of dealing with tax concerns is the potential for the taxpayer to experience negative effects on their mental health, such as stress. Determining the value of a person's mental health would be a very difficult endeavor. According to Hijattulah and Pope (2008), the term "other compliance charges" refers to any and all expenses incurred by the taxpayer that are not within the taxpayer's sphere of influence. According to the findings of Vaillancourt (1987), the compliance cost of Value-Added Tax (an indirect tax) is higher than the cost of compliance with Income Tax (a straightforward tax). In the study, eight of the eleven OECD countries that were examined claimed that the majority of their total tax compliance charges were accounted for by VAT compliance costs (Pope, 2001). Documentation, filing tax returns, and audit defense are all examples of costs that are linked with complying with rules (Cleroux, 1992; Klun, 2004; O'Keefe & O'Hare, 2008).

Penalties and Fines

Despite the fact that empirical evidence does not create a definitive picture of the association between fines and tax compliance, studies that have been conducted to investigate the influence of penalties on tax compliance have produced contradictory findings (Fischer et al, 1992). When the expected value of a tax was maintained constant but audit probabilities and penalties for noncompliance were modified, the findings suggested that compliance

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increased drastically with greater fines but not with higher audit probabilities (Friedland, Maital, and Rutenberg, 1978). This was evidenced by the fact that compliance increased significantly with larger fines.

Due to the fact that they place a greater financial burden on the taxpayer, punitive penalties have the potential to assist in the reduction of the number of instances of tax evasion. (Kirchler, 2007) Research has shown that increasing the amount of fines and penalties actually encourages people to ignore their tax obligations. Effective deterrence is achieved by the utilization of stringent sanctions in conjunction with consistent checks to ensure compliance. According to Allingham and Sandmo (1972), the chance of an audit and the possibility of incurring fines are two factors that have a significant impact on tax compliance. There is a clear correlation between the efficiency of these measures in discouraging tax evasion and the likelihood of being audited as well as the severity of any fines that may be imposed for noncompliance. If it is common known that there will be no audits carried out, then even the most severe tax penalties will have no impact whatsoever. Fines should be raised in order to decrease the potential financial advantage that may be gained from tax evasion and to maximise the effect that they have as a deterrence on citizens who are honest.

According to Kirchler et al. (2007), taxpayers will view the tax system as unfair if the penalties are excessively high, and they will look for ways to avoid paying because of this perception. In the country of Kenya, the penalties for failing to submit or file a VAT return on time are either five percent of the VAT that is payable or ten thousand Kenyan shillings for each tax period. Incorrect tax reports, inaccurate records, incorrect tax invoices, failure to

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display a certificate of registration, charging VAT when not registered, and charging VAT when not registered are just few of the many noncompliance concerns that can result in fines and penalties. Other such issues include failing to exhibit a certificate of registration.

Taxpayer Perception and Attitudes

According to the fiscal and social psychology theory of this study, perception toward taxes and its general compliance levels has been highlighted as one of the key elements that influence compliance. This is the case even in the tax compliance theory, which is mentioned in the theory. The degree to which individuals believe that the tax system is fair is a significant factor in determining their willingness to pay taxes (Coskun, 2009; Alm et al., 2011). Furthermore, according to Alabede et al. (2011), a taxpayer whose perspective is influenced by the benefits that he stands to obtain from the system may only consider the system to be fair for as long as he continues to reap the benefits of it. Both Roth (1989) and Jackson & Milliron (1986) came to the conclusion that taxpayers' ideas about the fairness of the system are associated with taxpayer attitudes and can be impacted by taxpayer perceptions about the tax system. This conclusion was reached based on the findings of their respective research projects. It was pointed out by Richardson (2006) that there is a significant connection between tax disobedience and how individuals feel about the fairness of the tax system.

When it comes to paying taxes, the mentality of a taxpayer is a significant factor that will determine whether or not they do so. A positive mood among taxpayers increases the likelihood that they will file their tax returns. According to research that were carried out in Kenya (Wanjohi,

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2010), the vast majority of Kenyan taxpayers believe that the country's tax structure is unfair. This occurred as a result of the fact that the majority of respondents did not agree with the assertion that they are paying their fair share of taxes and believed that their neighbors were not being truthful about their income and tax payments. When it comes to tax justice, there are two aspects. The first factor to take into consideration is equity in the transaction, which may be defined as the value of the products or services gained in comparison to the amount of tax paid.

At the same time as Thorndike (2009) emphasised the significance of people fulfilling their tax obligations, he also urged the government to do the same. According to Jackson and Milliron (1986), the second aspect of the tax system is its responsibility to guarantee that everyone pays their proportionate amount. People will have a poor view of the tax system as a whole if they perceive that the value of the services they receive from the government is not proportionate to the amount of taxes they pay, or if they believe that they are paying more taxes than other taxpayers do in comparison to this amount. Taxpayers who believe that the system is biased against them are more likely to engage in activities that violate tax regulations (Porcano, 1984). This is because they are more likely to believe that the system is biased against them.

SMEs Perception and VAT Compliance

In layman's terms, VAT compliance refers to the fulfillment of all VAT responsibilities in a free and comprehensive manner. 2010 publication by Iyer, Reckers, and Sanders. According to the majority of owners of small and medium-sized enterprises (SMEs), the high compliance costs that are imposed on SMEs are a means of reducing the competitiveness of SMEs in

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comparison to the large corporations in the country. Small and medium-sized enterprises (SMEs) in Ghana have a negative perception of value-added tax (VAT). According to Ameyaw, Korang, Twum, and Asante (2016), the majority of owners of small and medium-sized enterprises (SMEs) view taxation as being unfair and corrupt, which encourages non-compliance behavior. The perspective that small and medium-sized enterprises (SMEs) have regarding VAT compliance may not be the result of the introduction of high VAT rates; rather, it may be dependent on the illiteracy rate of these businesses. In Ghana, proprietors of small enterprises view compliance with the value-added tax (VAT) as an attempt by government authorities to impede their expansion. The fact that small and medium-sized enterprises (SMEs) view compliance with value-added tax (VAT) as the payment of funds that are used by tax authorities to provide for themselves and their family creates a stinky graft on the decisions that SMEs make on VAT compliance (Abdul-Jabbar, 2008).

VAT Compliance and SMEs Growth and Profitability

When small and medium-sized enterprises (SMEs) focus resources toward the payment of value-added tax (VAT), those resources might be reinvestment in the future growth of their operations (Tomlin, 2008).

When it comes to calculations, it is clear that the decrease in compliance and VAT rates leads to an increase in the profit margin of small and medium-sized enterprises (SMEs), which in turn leads to an increase in government revenue through the lowering of the shadow economy (Visak, 2008). The oppressive regulatory environment, in conjunction with the excessive number of regulatory bodies, places a significant burden on the day-

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to-day operations of small and medium-sized enterprise owners, which in turn impedes the expansion and profitability of their companies.

The growth and profitability of small and medium-sized firms are negatively impacted by the regulatory system's complexity, which creates a distortionary effect. According to Masata (2009), the complexity of regulatory systems gives rise to an increased desire to avoid paying value-added tax (VAT), since individuals are anticipated to transfer to forms that offer a reduced or no VAT burden at all. An inefficiently implemented value-added tax (VAT) system also resulted in a decrease in efficiency, an increase in the collection of charges, a waste of time for both taxpayers and staff, a low amount of taxes that were accrued, and a distortion of the optimal allocation of resources (Fazbod, 2009). Due to the fact that the compliance cost of SMEs is higher than that of other companies when scaled by sales or assets, these charges have a negative impact on small and medium-sized enterprises (SMEs) (Weichenrieder, 2007).

Ranking the Determinants of VAT compliance that hinder SMEs growth and profitability

Cross-tabulation on the survey responses is one of the statistical approaches that will be utilized in the ranking process. This method will be of assistance in the establishment of severity indexes and rankings (Boutillier and Uzunidis, 2006). The Hypothesis Related to the Rank Correlation Theory In order to discover how the individual determinants of VAT compliance restrict the growth and profitability of small and medium-sized enterprises (SMEs), assessing the rank correlations using a T-test, which is a type of nonparametric testing, would assist to arrange the elements in order of severity.

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VAT Policy Measures Favourable to SME Growth and Profitability

The enhancement of Ghana's financial and investment climate is needed in order to encourage VAT compliance. This is due to the fact that some small and medium-sized enterprises (SMEs) that operate in the shadow economy are of the opinion that the tax regulations that have been passed are adverse to their development. According to international tax dialogue (2007), small and medium-sized enterprises (SMEs) that are engaged in the shadow economy represent unrealized revenue potential and are meant to be captured by the Ghanaian tax net base. If tax rates do not necessarily have an effect on the development of small and medium-sized enterprises (SMEs), then tax policies are effective in fostering their growth. According to Shahrodi (2010), the burden of value-added tax (VAT) should be reduced for those who are economically disadvantaged, and the fight against corruption and tax evasion should be intensified.

The only way that tax laws can be designed to have a negative impact on the growth of small and medium-sized firms is to, in a roundabout way, impede their expansion. According to Ameyaw et al. (2016), China has implemented a tax policy that exempts financial institutions that provide loans to small and medium-sized enterprises (SMEs) from paying business taxes. This policy is intended to boost the financing of small and new enterprises (SMEs). Additionally, there has been an increase in the understanding of the risks associated with non-compliant conduct by small and medium-sized enterprises (SMEs). The development of tax laws that will support human capital training will assist in encouraging compliance decisions among SMEs organizations (Yaobin, 2007). Additionally, the government has the ability to

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implement policy incentives as well, such as tax rebates, with the intention of putting greater effort into the local procurement of raw materials and adding value to commodities that are intended for export.

Empirical Review

According to the findings of the research that has been carried out up to this point, tax compliance is affected by a wide range of distinct contributing elements. Throughout the course of a number of empirical investigations, a variety of factors that have an impact on VAT compliance have been discovered. There have been a number of studies that have been carried out in order to study the influence that tax education has on the degree to which taxpayers in Ghana are motivated to voluntarily comply with local tax legislation. At the moment, the self-assessment method is the official approach that is utilized for assessing the amount of tax that is owed. According to the self-assessment system, the taxpayer is the one who is responsible for determining the amount of tax burden they are responsible for, filling out their tax forms, and making their tax payments (Li et al., 2022).

Immediately following the acceptance of the tax return that was submitted, the revenue authority will conduct an audit with the intention of verifying the legitimacy of the transaction that was reported in the tax return as well as the taxes that were paid. This audit will continue for a considerable length of time. There is a connection between tax literacy and tax responsibility, as indicated by the findings of the research being conducted. The possibility of individuals and businesses complying with the value-added tax (VAT) increases when they are made aware of the VAT and when effective processes are put into place (Mentiwo, 2021). This increases the likelihood that they will comply with the VAT. A significant amount of

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research has been carried out on the subject of VAT compliance and the difficulties that are generally associated with it. The researcher, on the other hand, is not aware of any previous research that establishes a connection between VAT compliance and the expansion and profitability of small and medium-sized businesses (in other words, SMEs). As a result of the conclusions of this study, policymakers and the GRA will be able to develop an efficient VAT system that will not only increase voluntary compliance but will also assist small and medium-sized businesses (SMEs) in expanding their operations and enhancing their profitability.

Chapter Summary

Revenue collection rose as a result of greater tax compliance. According to this research, a rise in the VAT compliance rate will have a major impact on tax revenue collection and the size of the government's tax base. It will aid in the accomplishment of national aims. So that taxpayers may more easily comprehend the system and comply with it at lower cost, tax authorities should take steps to simplify it. This is key to fostering an environment where compliance is sought out on a voluntary basis.

In order to end noncompliance, fines and penalties must be applied fairly and effectively. But caution is warranted since harsh punishments can inspire dishonesty when filing tax returns. A rise in revenue is possible as a result of regular and effective taxpayer education which promotes voluntary compliance. Research will be conducted utilising a descriptive research strategy to gather data. None of the studies that were analysed truly investigated what factors affected VAT compliance in the construction business, despite the fact that many had attempted to investigate the topic of tax compliance as a whole.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter describes the research design, population, sampling design, data collection, and data analysis which will be employed to achieve the research objective of this study.

Research Approach

Generally, there are two main types of research approaches; qualitative and quantitative. Qualitative research is a scientific method of observation predominantly used for collection or analysis procedures that generates nonnumerical data. According to Leavy (2017), in the qualitative approach, the aim is to explain rather than to predict phenomena and understanding things rather than to measure. Qualitative research, comparatively, is the systematic empiric investigation of observable phenomena using statistical, mathematical, or computational techniques in producing quantitative data.

Quantitative data is in numerical form such as statistics, percentages, etc. (Osei-Assibey, 2014) said that research design "provides the glue that holds the research project together and it is used to structure the research to show how all of the major parts of the research project work together to try to address the central research questions". The perspective of this research is based on the researcher's intention (who is affected), outcomes (anticipated impact), questions (nature of objective of study) and processes (how research is understood) (Visser, et. al. 2019).

Research Design

This study adopted a descriptive research design which is best for this study as it describes characteristics associated with the subject population. According to Coopers and Schindler (2003), descriptive design discovers and measures the cause and effect of relationships between variables. The descriptive research will determine and report the way things are and provide the alternative possible behaviour, attitudes, ideals and characteristics of such things (Mugenda, 2003). The researcher will use a descriptive research design because this enables the researcher to collect a large quantity of information about the population under study. A survey design is appropriate as the data required for analysis is to be collected from a large population that is SMEs registered within Kumasi Metropolis, Ghana. The descriptive design is appropriate in the study since it is accurate, factual and systematic.

The descriptive approach will be incorporated with the survey design to enable the researcher to collect comprehensive qualitative and quantitative data that will enrich the outcome of the study. For that reason, the approach will enable the researcher to establish Value Added Tax compliance and SMEs growth and profitability in Kumasi Metropolis.

Data Source and Description

The study used data collected on tax compliance cost by the Directorate of Research, Innovation and Consultancy (DRIC), University of Cape Coast on the topic "Ghana Beyond Aid: Examining Tax Knowledge, Compliance Cost and Tax Compliance". The data is a cross sectional survey designed that gather information on small and medium scale enterprise tax

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knowledge and compliance. The data was conducted between November, 2019, and January, 2020 from selected regions (Ashanti region).

The data has thirteen Moules. Module A gives the background information of respondents, followed by Module B which gives the identification of the firm. Module C provides information on employment data, Module E gives information on expenses and assets of the firm, module E indicates the taxes paid by the firm, Module F provides knowledge on Ghana's tax system, Module G gives information on tax compliance, Module H provides information on tax compliance cost, Module I gives information on firm's perception, Module J provides information on tax education, Module K gives information on Technology Adoption, Module L provides information on firm's investment decision and the last module (Module M) provides additional information that was not captured in the previous modules of the firm.

Empirical Model Specification Econometric Specification

The study employed an Ordinary Least Square regression model to examine the effect of the level of tax knowledge on tax compliance and how tax compliance affects firms' profitability. The study draws it model from the works of Allingham and Sandmo (1972), Kuug, (2016) and Okpeyo et al (2019). The empirical tax knowledge model is specified as:

$$VATC = \alpha_0 + \alpha_1 TKlevel \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.1$$

The equation (1) is a simple regression analysis which considers only Tax knowledge (TKlevel) as an explanatory variable and the dependent variable is VAT compliance (VATC).

$$VATC = \alpha_0 + \alpha_1 TKlevel + \alpha_2\, lnATP + \alpha_3 TNO + \alpha_4 Structure +$$

$\alpha_5 Distance + \alpha_6 \text{lnExp} + \alpha_7 Age + \alpha_8 \text{Sex} + \upsilon$ ………………………..2

The equation (2) is a multiple regression with other control variables. lnATP is the log of amount of tax paid, TNO is number of owners, distance is the total number of minutes it takes the firm to visit the tax office, lnExp is the log of the total expenses of the firm, age is the age of the firm owners, manager or caretaker and sex is sex of the firm owners, manager or caretaker.

Lastly, the study investigated the effect of VAT Compliance (VATC) on Profitability (lnTun). Profitability is measured by the firm's turnover. The model is expressed as;

$lnTun = \alpha_0 + \alpha_1 VATC + \upsilon$ …………………………………..…………..3

Just like the first model, the equation (3) is the model of only the VAT compliance on profitability

$lnTun = \alpha_0 + \alpha_1 Age + \alpha_2 Sex + \alpha_3 lnExp + \alpha_4 VATC + \alpha_5 TNO +$

$\alpha_6 \text{lnATP} + \alpha_7 Location + \upsilon$ …………………………………………..4

In equation (4), other control variables have been added to equation 3.

Variable Definition and Measurement

Table 1 present the name of the variables used in the study, their definition and how they are measured.
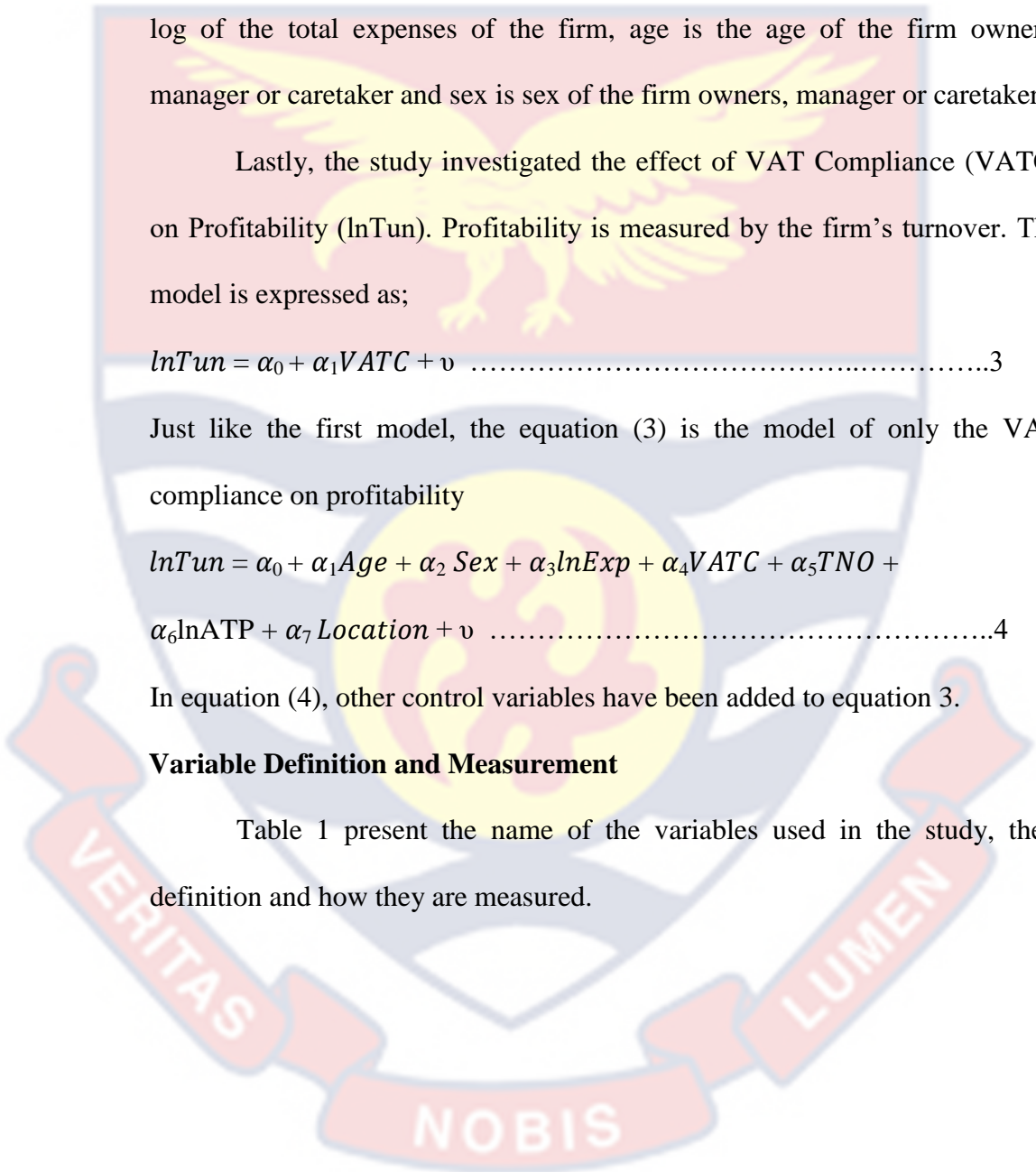
Table 1: Variable Definition and Measurement

SN	Variable and Definition	Measurement
VATC	VAT Compliance	0=non-compliance, 1=comply
TKlevel	Tax Knowledge level	0=low knowledge, 1=average knowledge 2=high knowledge
lnATP	Log of Amount of Tax Paid	Natural log of the amount of tax paid
TNO	Number of Owners	Total number of people who owns the SMEs
Structure	Structure in which the firm operate	0=moveable structure, 1=nonmoveable structures
Distance	Distance to tax office	Distance to tax office measured in minutes
lnExp	Log of Expenditure	Amount of expenditure of the SME in Ghana cedis
Age	Age of manager, owner or caretaker	Age in years of the manager, owner or caretaker
Sex	Sex	0=Male, 1=Female
Location	Location of the SMEs	0=Urban, 1=Rural

Source: Authors Construct (2022)

Data Analysis

According to Johnson (2014) data analysis are sometimes considered the most interesting and challenging aspect of any piece of research. He opined that data analysis refers to a procedure for deriving meaning from the information that had been retrieved from respondents during a study.

Data was recorded and analysed through the use of Statistical Package for Social Sciences (SPSS) software, and STATA. The researcher used a descriptive data analysis and time series estimations.

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Chapter Summary

This chapter developed and presented the various methods employed in the study. The chapter, therefore, discussed key elements of the research methods concerning research design, data source and description, data instrument, among others. The study used a quantitative method design, following the positivist paradigm. Ordinary Least Square model was used as estimation technique after carrying out some descriptive analysis. The chapter ends with the variable's definition and measurement.
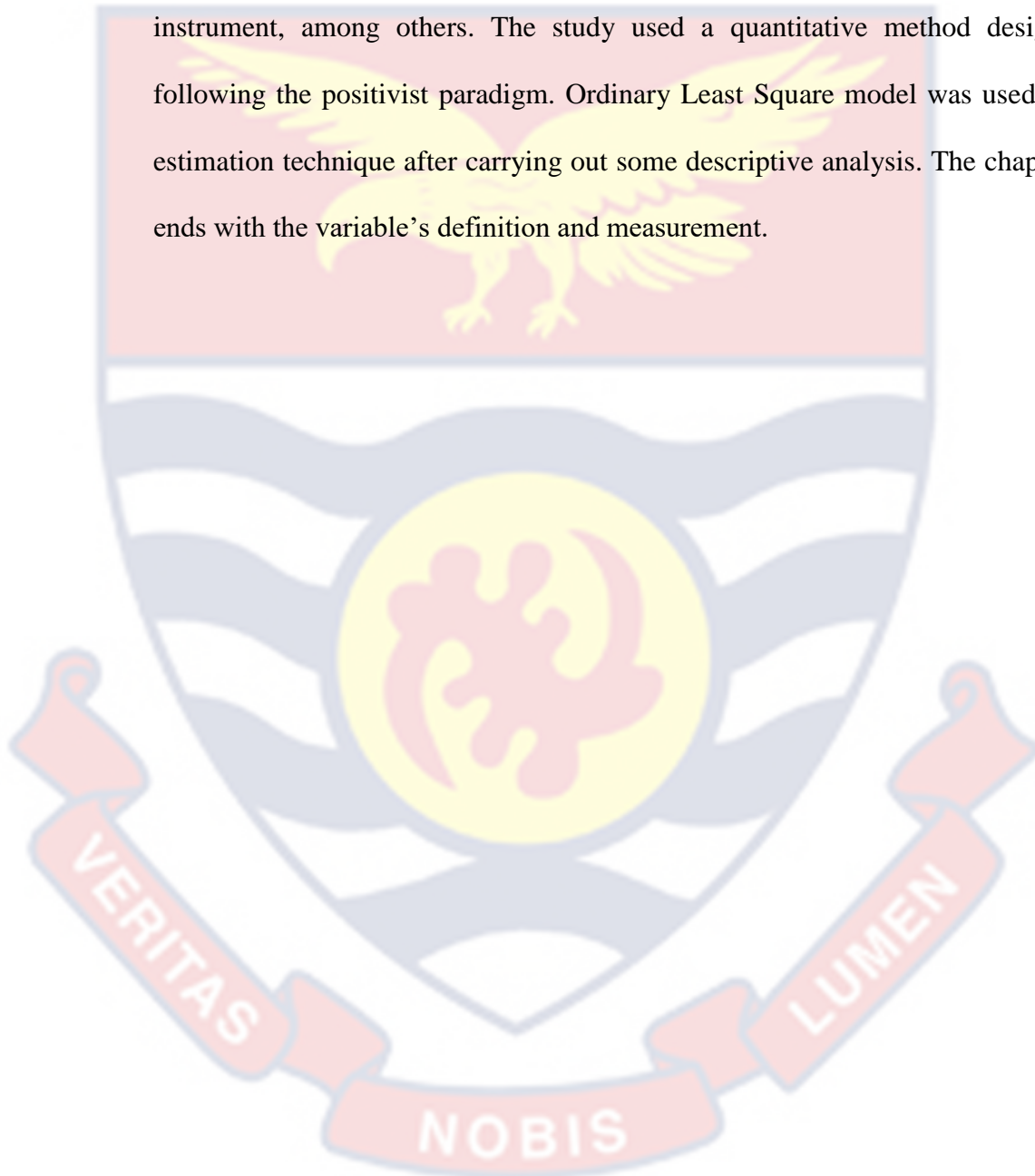
CHAPTER FOUR

RESULT AND DISCUSSIONS

Introduction

This chapter presents an analysis and discussion of the results of the study. This chapter provides the descriptive statistics of continuous and discrete variables. The next section presents the level and correlates of tax knowledge among small taxpayers.

Demographic Characteristics of the SMEs

Table 2 presents the summary statistics of the variables that were employed in the study. The number of observations, mean, standard deviation, minimum and maximum of the variables were reported.

Table 2: Summary Statistics

Variable	Obs	Mean	Std. dev.	Min	Max
Age	229	11.28384	7.55464	1	48
Amount of Tax Paid	229	2611.553	1034.108	320	10400
Distance to tax office	229	28.26406	15.16369	1	120
Expenses	229	13977.05	7117.17	10	75050
Total Number of owners	229	1.445415	1.460845	1	15
Turnover	229	11374.18	12086.73	400	80000
VAT Compliance	229	11.0655	8.838219	0	20

Source: DRIC, UCC (2020)

It is clear from the table that the mean age of small and medium-sized enterprises (SMEs) is approximately 11 years old, while the standard deviations of these businesses are approximately 8 years old. The normal level of conformity with the small and medium-sized enterprise (SME) tax system in Kumasi, Ghana, is demonstrated by these mean tax compliance data. The minimum age for small and medium-sized enterprises (SMEs) is one, while the maximum age is forty-eight. The fact that the average age of small and

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medium-sized enterprises (SMEs) is approximately 11 years indicates that they have some understanding of value-added tax (VAT) and that they are familiar with the ins and outs of VAT. As a result, they are able to avoid their VAT obligations.

With a mean of around 26612 and a standard deviation of approximately 1034, the report from the Table indicates that the least amount of VAT paid is 320, and the greatest amount paid is 10,400. This information pertains to the payment of VAT. In terms of walking distance, the shortest distance between the SME office and the VAT office is around one minute, while the longest distance is two hours. Small and medium-sized enterprises (SMEs) are able to fulfill their VAT responsibilities because the average distance between their workplaces and the VAT offices is approximately 28 minutes, with a standard deviation of approximately 16 minutes. The least amount of expenditure that these small and medium-sized enterprises (SMEs) have is 10, and the greatest amount that they have is 75,050. The average amount that they spend is around 13977, and the standard deviation is approximately 7117. Small and medium-sized enterprises (SMEs) have a lower tax burden, and there is a greater possibility that they may avoid paying taxes.

One is the smallest possible value for the number of owners, and fifteen is the highest possible value. There is a minimum value of one. This has a mean and a standard deviation of approximately one and one respectively, which suggests that the ownership of small and medium-sized enterprises (SMEs) is one-man firms among the 229 respondents. The minimum returns of these small and medium-sized enterprises (SMEs) are

400, and the maximum returns are 80,000. Additionally, the average returns of these SMEs are around 11374, and the standard deviation is approximately 12087. Additionally, with a mean of approximately 11 and a standard deviation of approximately 9, it is reported that the VAT compliance ranges from a minimum of 0 to a maximum of 20 with an average of approximately 11. The fact that these small and medium-sized enterprises (SMEs) comply with their tax duties is indicated by this.

Descriptive Statistics

The descriptive statistics of the variables that were used in the study are presented in Table 3, which can be seen here. The percentage of male owners of small and medium-sized enterprises (SMEs) who do not comply with VAT is approximately 61 percent, whereas the percentage of female owners who do not comply with VAT is approximately 39 percent. Furthermore, around 71 percent of males fulfill their VAT obligation, whereas the remaining 29 percent of individuals who fulfill their VAT obligation are females. Out of the respondents who do not comply with their tax duties, around 28 percent have a low level of tax knowledge, while approximately 49 percent have a medium level of tax knowledge and 23 percent have a high level of tax knowledge. Despite this, they do not comply with their tax requirements. The percentage of people who comply with taxes, on the other hand, is approximately 35 percent, 44 percent, and 21 percent, respectively, with little, moderate, and high tax knowledge.

Table 3: Descriptive Statistics

Variable	Don't Comply	Comply	Total
Sex			
Male	61.22	70.99	66.81
Female	38.78	29.01	33.19
Level of Tax Knowledge			
Low	27.55	35.11	31.88
Average	48.98	43.51	45.85
High	23.47	21.37	22.27
Type of structure			
Movable	27.55	25.19	26.20
Non-movable	72.45	74.81	73.80
Location			
Urban	97.96	96.95	97.38
Rural	2.04	3.05	2.62
Total	100.00	100.00	100.00

Number observation is 229.
Source: DRIC, UCC (2020)

In addition, the table reveals that around 28 percent of individuals who do not comply with tax regulations have constructions that are movable, in contrast to the 72 percent of individuals who have structures that are not movable. People who comply with taxes because their structures are mobile make up around 25 percent of the population, while people who have structures that are not mobile make up approximately 75 percent of the population. According to the location, it is possible to see that 98 percent of those who do not comply with taxes are located in metropolitan regions, whereas approximately 2 percent of those who do not comply with taxes are located in rural areas. Additionally, with regard to those who comply, it is evident from the Table that the majority of individuals who comply with taxes

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are located in urban regions, accounting for 97 percent of the total, while the remaining 3 percent are considered to be in rural areas.

Level of VAT Knowledge among SMES Managers/Owners

The results of the survey regarding the level of tax awareness among firm managers, caretakers, and owners are presented in Figure 1. The degree of tax knowledge is determined by the number of questions that are correctly answered as part of the tax knowledge test. These questions include legal, technical, and general tax questions. For the purposes of this study, those who have a score of less than fifty percent on the questions are considered to have a low level of tax knowledge. Those who have a score between fifty and seventy percent are considered to have an average level of tax knowledge, and those who have a score higher than seventy percent are considered to have a high level of tax knowledge.

	Low	Average	High
Percent	31.88	45.85	22.27
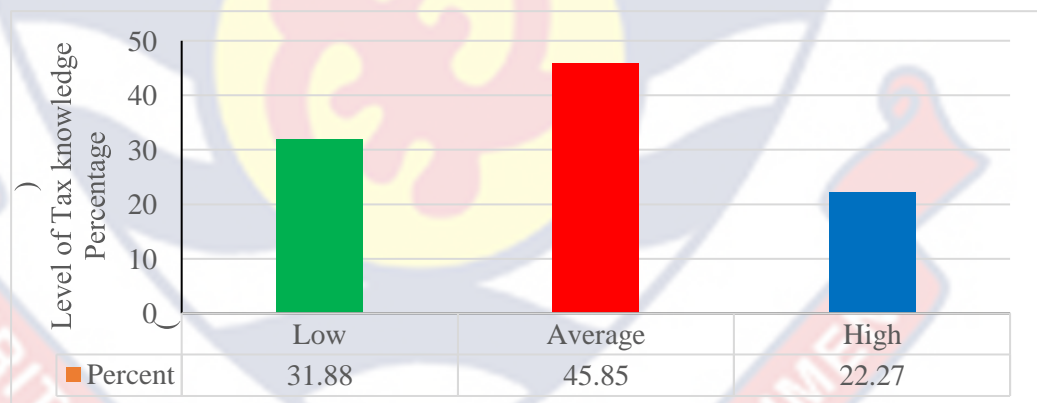
Figure 1: Level of Tax Knowledge
Source: DRIC, UCC (2020)

As can be seen in figure 1, we can also observe that approximately 32 percent of the managers and caretakers of small and medium-sized enterprises (SMEs) in the Ashanti Region have a low level of tax knowledge. According to the survey, approximately 46 percent of the respondents have an average level of tax knowledge, and approximately 22 percent of the field survey have

a high level of tax knowledge. This indicates that the majority of the respondents had an average level of understanding regarding taxes, and as a result, their failure to comply with or fulfill their tax duties is due to their own personal discretion.

Element of Tax Knowledge score by firm's characteristics

Figure 2 illustrates the numerous aspects of tax knowledge that will be graded based on the peculiarities of the different companies. Tax Knowledge (TK), General Tax Knowledge (GTK), Technical Tax Knowledge (TTK), and Legal Tax Knowledge (LTK) are the components that make up this tax knowledge. Out of the total number of respondents, approximately 56 percent of these respondents are knowledgeable about taxes, which indicates that managers and caretakers have a fair knowledge about taxes. On the other hand, approximately 23 percent of these respondents have knowledge on general taxes, and as a result, they are aware of the significance of taxes and the ways in which they are used in general.
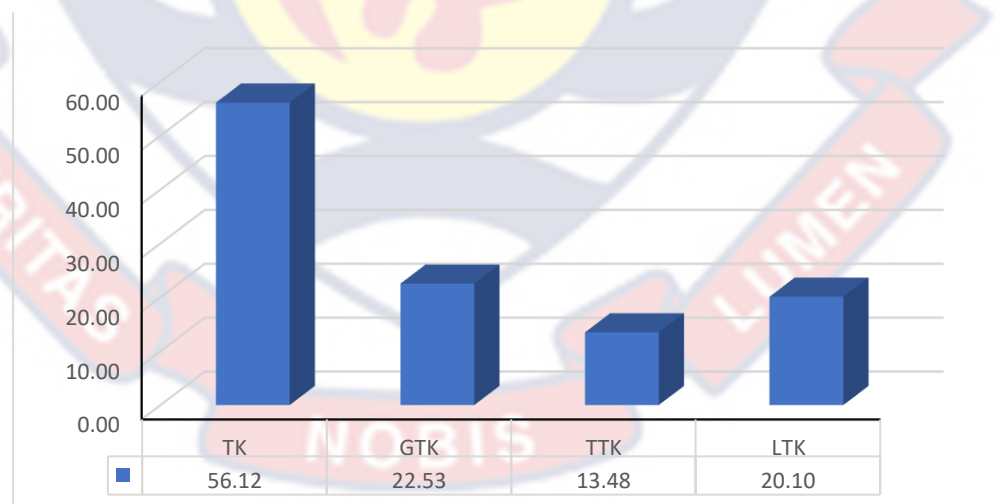
	TK	GTK	TTK	LTK
■	56.12	22.53	13.48	20.10

Figure 2: Element of Tax Knowledge Score
Source: DRIC, UCC (2020)

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Once more, 13% of those who participated in the survey have an average level of knowledge regarding the technical aspects of taxation. This indicates that the managers and caretakers of small and medium-sized enterprises (SMEs) in Kumasi are now well-versed in the technical aspects of taxation and the reasons why they should pay their taxes. It was stated from the figure that approximately ten percent of the respondents have legal knowledge on taxes. This is in reference to the fact that legal tax knowledge is an element of tax. Because of this, the vast majority of them are unable to comprehend and be aware of the consequences that come with evading or failing to pay their taxes, and they may always act in a manner that is contradictory to this.

Effect of VAT Knowledge and other Factors on VAT compliance

Estimating the influence that VAT knowledge alone has on VAT compliance among small and medium-sized enterprises (SMEs) in the Kumasi metropolitan area was the second objective of the study. Assessing and analyzing the effect of VAT knowledge by small and medium-sized enterprises (SMEs) and their managers or caretakers is of utmost importance since it will assist policymakers in developing strategies to educate SMEs and their managers or caretakers about VAT in order to enhance their level of knowledge. As a result, the various econometric findings are shown in Table 4, which illustrates the effect of VAT knowledge on VAT compliance among small and medium-sized enterprises (SMEs) and caretakers and managers.

The results presented in Table 4 demonstrate that the impact of VAT knowledge on VAT compliance varies depending on the level of VAT knowledge, which can be classified as either average or high. This is in

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contrast to the situation in which there is no knowledge whatsoever regarding VAT. When it comes to their level of knowledge, a small and medium-sized enterprise (SME) that has an average level of knowledge on value-added tax (VAT) will experience a reduction in VAT compliance of 1.962 cedis. On the other hand, a cedi increase in VAT will cause a reduction in VAT compliance of 2.679 cedis when the SME firm or the manager/caretaker has a high level of knowledge about VAT, which is significant at 10 percent. The conclusion that can be drawn from this is that as small and medium-sized enterprises (SMEs) acquire or acquire knowledge about value-added tax (VAT), there is a possibility that they will not comply with VAT since they are familiar with the intricacies of how the VAT system operates.

Despite the fact that the coefficient of those with average knowledge is modest, the influence of VAT knowledge on VAT compliance across the various small and medium-sized enterprises (SMEs) diminishes as their VAT knowledge grows.

Table 4: Effect of only the Level of VAT Knowledge on VAT Compliance

VATC1	Coef.	St.Err.	t-value	pvalue	[95% Conf. Interval]		Sig
TKlevel							
Average	-1.962	1.343	-1.46	0.145	-4.608	0.685	
High	-2.679	1.608	-1.67	0.097	-5.849	0.490	*
Constant	12.562	1.031	12.18	0.000	10.529	14.594	***
Mean dependent var		11.066	SD dependent var			8.838	
R-squared		0.014	Number of obs			229	
F-test		1.658	Prob > F			0.193	
Akaike crit. (AIC)		1649.557	Bayesian crit. (BIC)			1659.858	

*** *p<.01, ** p<.05, * p<.1*
Source: DRIC, UCC (2020)

Estimating the impact that VAT knowledge has on VAT compliance among small and medium-sized enterprises (SMEs) in the Kumasi metropolitan area was the third objective of the study. In order to assist policymakers in developing strategies to educate small and medium-sized enterprises (SMEs) and their managers or caretakers about VAT in order to enhance their level of knowledge, it is extremely important to evaluate and analyze the effect of the level of VAT knowledge that small and medium-sized enterprises (SMEs) and their managers or caretakers have achieved. As a result, the various econometric findings are shown in Table 5, which illustrates the effect of VAT knowledge on VAT compliance among small and medium-sized enterprises (SMEs) and caretakers and managers.

Table 5: Level of VAT Knowledge on VAT Compliance

VATC	Coef.	St.Err.	t-value	pvalue	[95% Conf	Interval]	Sig
LevelTK							
Average	-2.732	1.532	-1.78	0.076	-5.757	0.293	*
High	-4.044	1.887	-2.14	0.034	-7.768	-0.319	**
lnATP	-4.721	2.172	-2.17	0.031	-9.01	-0.431	**
TNO	0.59	0.498	1.19	0.238	-0.393	1.572	
Structure							
Nonmovable	1.027	1.615	0.64	0.526	-2.162	4.217	
Distance	-0.134	0.043	-3.13	0.002	0.049	0.218	***
lnExp	0.929	0.508	1.83	0.069	-0.074	1.931	*
Age	0.002	0.088	0.02	0.982	-0.172	0.176	
Sex							
Females	-1.663	1.431	-1.16	0.247	-4.489	1.162	
Constant	36.822	17.409	2.12	0.036	2.448	71.196	**

Mean dependent var	10.177	SD dependent var	8.996
R-squared	0.134	Number of obs	229
F-test	2.833	Prob > F	0.004
Akaike crit. (AIC)	1259.356	Bayesian crit. (BIC)	1291.003

*** p<.01, ** p<.05, * p<.1
Source: DRIC, UCC (2020)

According to the data presented in Table 5, the effect of VAT knowledge on VAT compliance varies depending on the level of VAT knowledge, which can be classified as either average or high. This is in contrast to the cases in which individuals have no understanding whatsoever regarding VAT. A cedi increase in VAT will cause a 4.044 reduction in VAT compliance when the SME firm or the manager/caretaker has a high level of knowledge about VAT, and this is significant at 10 percent and 5 percent respectively. When a SME firm has an average level of knowledge on VAT, a cedi increase in VAT will lead to a reduction in VAT compliance by 2.732, and a cedi increase in VAT will cause a 4.044 reduction in VAT compliance. The conclusion that can be drawn from this is that as small and medium-sized enterprises (SMEs) acquire or acquire knowledge about value-added tax (VAT), there is a possibility that they will not comply with VAT since they are familiar with the intricacies of how the VAT system operates.

The coefficient of distance is -0.134, which indicates that a unit increase in the distance that businesses are required to travel to the GRA office would result in a 0.134 percentage point decrease in the amount of tax requirement that they are able to fulfill. This information is provided in Table 5. According to Attobrah (2020), this indicates that the greater the distance between these small and medium-sized enterprises (SMEs) and the GRA, the greater the likelihood that they will fail to fulfill their tax responsibilities. Additionally, a one cedi increase in the expenditures of small and medium-sized enterprises (SMEs) will result in a 0.929 percent increase in their level of compliance as compared to those who do not spend. As a result, when businesses spend more money on the acquisition of goods or inputs in

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enormous quantities, there is a greater possibility that they will fulfill their tax obligations. This is due to the fact that they are well-known and established, and as a result, they will not engage in activities that could put their company in jeopardy or cause them to lose their company in the event that the Government of Ghana takes legal action against them.

Effect of VAT Compliance on the Profitability of SMEs

Among the small and medium-sized enterprises (SMEs) in the Kumasi metropolitan area, the fourth purpose of the study was to determine the influence that VAT compliance has on the profitability of SMEs. Small and medium-sized enterprises (SMEs) that comply with tax laws will, on average, see a 0.249 percent increase in their tax burden when compared to those who do not comply with tax laws. This can be seen from the fact that when businesses pay more taxes, they are more likely to raise or inflate their prices in order to compensate for the amount of taxes that they have paid. This is because businesses would prefer not to be responsible for all of the taxes that are imposed, and as a result, they end up shifting all or some of the burden of taxation onto the consumers, which will result in an increase in their profit margins.

Table 6: Effect of Tax Compliance on Profitability

lnTun	Coef.	p- value	value	[95% Conf	Interval]	Sig
VAT Compliance		0.131	1.89	0.059	-0.01	0.507	*
Comply	0.249					
Constant	8.753	0.099	88.71	0.000	8.558	8.947	***
Mean dependent var		8.893	SD dependent var		0.977	
R-squared			0.016	Number of obs		229
F-test		3.590	Prob > F		0.059	
Akaike crit. (AIC)			622.083	Bayesian crit. (BIC)	628.898	

*** *p<.01, ** p<.05, * p<.1*
Source: DRIC, UCC (2020)

Holding everything constant, firms are like to make 8.753 when there is a cedi increase in the amount of tax they pay.

Effect of Tax Compliance and other Factors on Profitability

Additionally, the fourth objective set out to investigate the impact on VAT compliance as well as other aspects that influence profitability. Based on the information presented in Table 7, it is clear that compliance with taxes, and more especially VAT, is dependent on other criteria such as expenditure, location, and tax knowledge. Because of this, it is possible to deduce that a rise in expenditures of cedis will result in a 0.203 percentage point increase in their profitability. This could imply that if small and medium-sized enterprises (SMEs) increase their expenditures, there is a possibility that their profitability will increase. This is justifiable due to the fact that if any company spends more money on acquiring more goods, there is a possibility that the company will increase their profit margin because the company in question is going to make more sales.

Table 7: Effect of Tax Compliance and other Factors on Profitability

lnTurnover	Coef.	St.Err	t-value	p-value	[95% Conf. Interval]		Sig
Age	-0.011	0.009	-1.18	0.241	-0.029	0.007	
Sex of manager							
Female	0.109	0.152	0.72	0.472	-0.19	0.409	
lnExp	0.203	0.055	3.68	0.000	0.094	0.312	***
VAT Compliance							
Comply	0.311	0.141	2.20	0.029	0.032	0.59	**
TNO	0.115	0.068	1.70	0.091	-0.019	0.249	*
lnATP	0.129	0.233	0.55	0.581	-0.33	0.588	
Location							
Rural	-0.758	0.415	-1.83	0.07	-1.578	0.061	*
Constant	6.142	1.837	3.34	0.001	2.515	9.769	***

|			
Mean dependent var	8.926	SD dependent var	0.966
R-squared	0.163	Number of obs.	229
F-test	4.547	Prob > F	0.000
Akaike crit. (AIC)	460.756	Bayesian crit. (BIC)	485.936

*** $p<.01$, ** $p<.05$, * $p<.1$
Source: DRIC, UCC (2020)

Additionally, the profitability of small and medium-sized enterprises (SMEs) in the Kumasi metropolitan area is impacted by location. As can be seen from the table, a change in the location of small and medium-sized enterprises (SMEs) will result in a decrease of 0.758 percentage points in the profit margin of the firm. This is in comparison to firms located in metropolitan regions. This indicates that businesses situated in rural locations generate a smaller or less substantial amount of profits in comparison to businesses situated in urban areas. This disparity may be attributed to a variety of variables, including the size of the population, the occupations of the citizens, and the availability of financing to grow various business and investment prospects. Companies that are located in urban areas have access

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to the majority of these resources, which means that they have the resources available to them to increase their profit margin. As a result, they always increase their profit net, and at the end of the day, they will honor their tax obligations because they will increase their expenditures over the course of time.

Chapter Summary

This chapter presented the empirical results of the study. This includes the descriptive and summary statistics of the variables in the study. Again, some post estimation tests were conducted. Average, VAT compliance
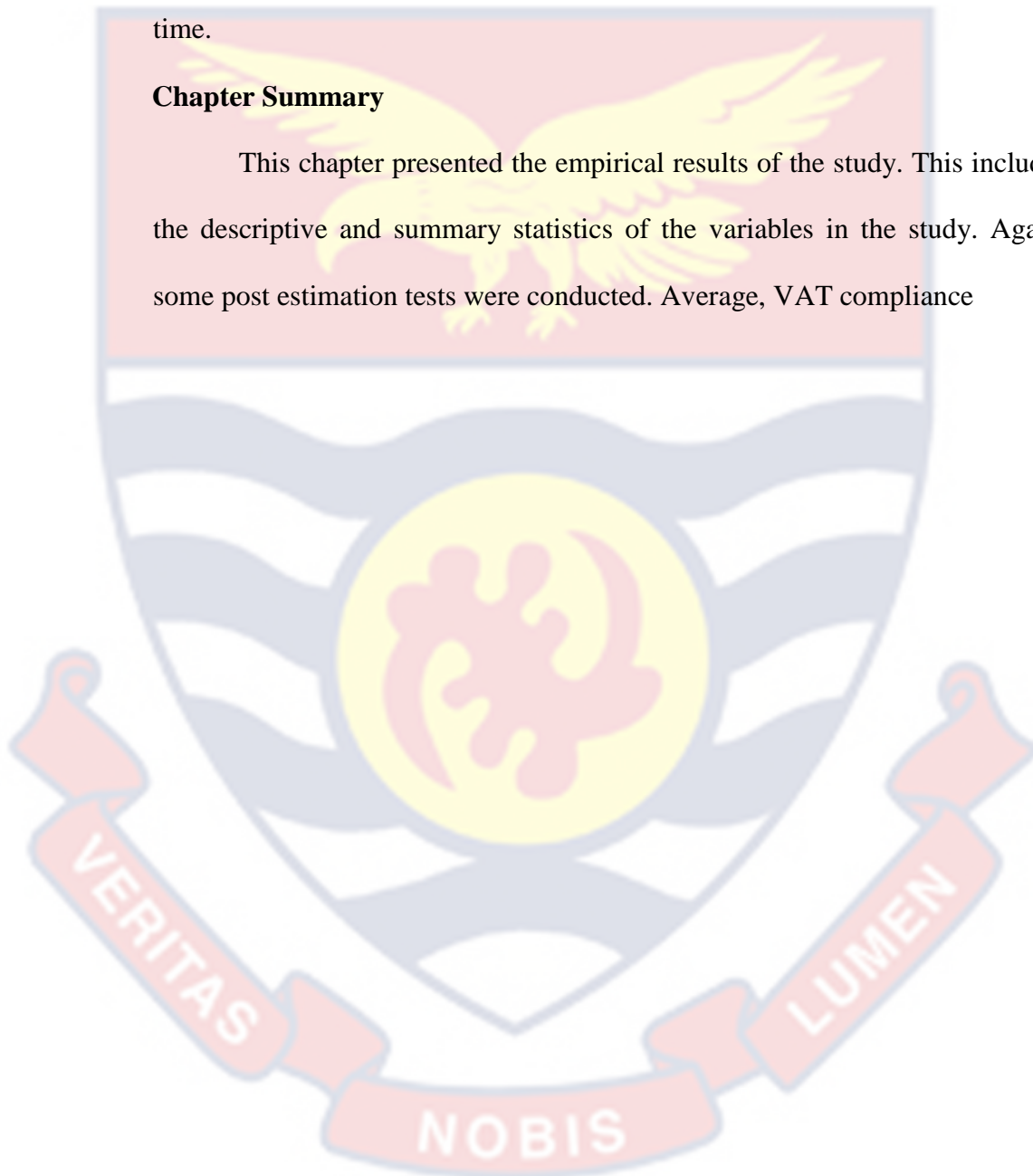
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This research has been fascinating. This chapter presents and draws conclusions based on the data analysis offered in the prior chapter. In this chapter, chapters one through four of the research are summarised. Additionally, the results summarised in chapter four are included in this chapter. This chapter also includes the conclusions reached as a result of the different results. In addition, the chapter offered suggestions based on the study's major results and conclusions. There are also suggestions for further research.

Summary

The purpose of this studies examine value added tax (VAT) compliance and small and medium enterprises growth and profitability in Kumasi metropolis in Ghana. The objectives of the study were to:

- Analyze the level of VAT Knowledge among SMEs managers/owners in the Kumasi metropolis.

- To investigate how VAT knowledge influence VAT compliance in the Kumasi metropolis.

- Examine the perceived factors that contribute to VAT compliance among SMEs managers/owners in the metropolis.

- Investigate how VAT compliance affect the growth and profitability of SMEs in the metropolis.

The research was based on three different theories: the ability to pay hypothesis, the economic deterrence theory, and the fiscal psychology theory.

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Specifically, the fiscal psychology hypothesis places an emphasis on and provides an explanation for the demographic elements that influence the behavior of individuals in terms of conforming to a policy. The economic deterrence theory provides an explanation for the situations in the economy that influence the degree to which individuals comply with tax policies. Lastly, the ability to pay theory highlighted that the willingness to honor tax obligations is not the primary element that determines VAT compliance; rather, the ability of individuals and firms to have the requisite financial means to do so is also a significant component in determining VAT compliance. Using the quantitative research design that adheres to the positive research ethic was the approach that was chosen.

For the purpose of this study, secondary data were gathered by the Directorate of Research Innovation and Consultancy. The study was titled "Ghana beyond Aid: Examining Tax Knowledge, Tax Compliance cost, and Tax Compliance in Ghana." The information was gathered by the utilization of a multistage sampling approach, which included both probabilistic (basic random) and non-probabilistic sampling techniques (purposive). This multistage technique comprised picking the STOs, districts, and enterprises based on the proportion of those STOs' tax capacity. This was done in order to provide a more comprehensive approach. During the course of the research, the 229 small and medium-sized businesses that were registered inside the Kumasi Metropolis and on which the data was consistent were utilized. There was a response rate of 72.5% for the data that was used. The findings that were derived by the researcher were based on the responses that were provided by the respondents. These findings were then utilized to draw

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inferences and provide recommendations. Considering the demographic features of the companies, it can be inferred that the majority of the owners, managers, and caretakers are males. Furthermore, the majority of their enterprises are located in non-movable structures and are primarily located in urban centers. In the following part, the most important findings from the study will be discussed.

Summary of Key Findings

It was shown that the owners and managers of small and medium-sized businesses have an average level of awareness on how taxes work. It is important to note that approximately 45.85 percent of taxpayers who are small and medium-sized businesses have an average degree of expertise regarding taxes. For the most part, owners, managers, and caretakers are knowledgeable about general tax issues, as opposed to having understanding of technical and legal matters.

After additional investigation, it was discovered that the level of tax knowledge has a detrimental impact on the level of VAT compliance. The explanation for this is based on the fact that individuals who have a greater understanding of taxes will be aware of the loopholes that can be used to the benefit of businesses, which will ultimately result in a reduction in VAT compliance.

Last but not least, the research discovered that compliance with VAT has an impact on the profitability of small and medium-sized businesses. Additionally, the study discovered that managers, owners, and caretakers who comply with VAT have higher turnovers in comparison to businesses that do not comply with VAT.

Conclusions

It is possible to draw the conclusion that the owners and managers of small and medium-sized businesses have an average level of understanding regarding taxes. Consequently, the findings of the study indicate that approximately 45.85 percent of taxpayers who are small and medium-sized businesses have an average degree of understanding regarding taxes. The findings of the study also made it abundantly evident that those who have expertise in general tax concerns have a score that is higher than those who had technical and legal knowledge.

According to the findings, the level of tax knowledge can have a significant impact on the degree to which an individual complies with tax laws. The explanation for this is based on the fact that individuals who have a greater understanding of taxes will be aware of the loopholes that can be used to the benefit of businesses, which will ultimately result in a reduction in VAT compliance.

Lastly, an estimation was made on the impact that compliance has on the profitability of businesses. On the other hand, it was not evident why managers, owners, and caretakers of businesses that comply with VAT had higher turnovers in comparison to businesses that do not comply with VAT. On the other hand, one probable explanation could be that businesses who comply with VAT are perceived to be legitimate organizations, and as a result, customers choose to purchase from these kinds of businesses.

Recommendations

On the basis of the most important findings and the conclusions that were presented in the prior part, the study came up with the two primary suggestions. The first one is addressed to the authorities in charge of taxes,

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while the second one is addressed to the proprietors, managers, and caretakers of small and medium-sized businesses.

Due to the fact that there are a significant number of firm managers, owners, and caretakers who have a limited understanding of taxes, it is advised that the Ghana Revenue Authority increase the intensity of their tax education program.

It is advised that owners, managers, and caretakers of small and medium-sized enterprises take use of the chances for tax education that are made available to them by the Government of the Republic of the Philippines (GRA). This is because having a greater understanding of tax issues has the ability to increase their turnover and also assist them in avoiding paying VAT.

Suggestions for Further Studies

Only the owners, managers, and caretakers of small and medium-sized businesses located in the Kumasi Metropolis were taken into consideration in the current study. As a result, the scope of the study needs to be expanded to include other metropolitan areas because these individuals also make a significant contribution to the collection of income.

Again, the researcher came to the conclusion, while studying the relevant literature, that the majority of the studies that had been conducted in the past had utilized the quantitative methodology. As a result, it is recommended that additional research be carried out on VAT and small and medium-sized businesses using either a qualitative technique or a hybrid approach. It is also possible to perform a study that focuses solely on small and medium-sized businesses that are registered with the Geographical Registration Authority (GRA) as opposed to businesses that are not registered.

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APPENDIX

Postestimation for the Effect of VAT Compliance Affect Profitability of SMEs Heteroskedasticity for the effect of tax knowledge level on VAT compliance

Breusch–Pagan/Cook–Weisberg test for heteroskedasticity

Assumption: Normal error terms

Variable: Fitted values of VATC1 H0: Constant variance chi2(1) = 0.17

Prob > chi2 = 0.6804

Omitted variables test on the effect of tax knowledge level on VAT compliance

Ramsey RESET test for omitted variables

Omitted: Powers of fitted values of VATC1

H0: Model has no omitted variables

$F(3, 162) = 1.53$

Prob > F = 0.2097

Linktest for the model for the effect of tax knowledge level on VAT compliance

VATC1	Coefficient	Std. err.	t	P>t	[95% conf. interval]	
_hat	1.867043	0.721733	2.59	0.011	0.442449	3.291637
_hatsq	-0.03733	0.029944	-1.25	0.214	-0.09644	0.021771
_cons	-4.55509	4.196627	-1.09	0.279	-12.8386	3.728429

Postestimation for the Effect of Tax Compliance and other Factors on Profitability Heteroskedasticity for the Effect of Tax Compliance on Profitability

Breusch–Pagan/Cook–Weisberg test for heteroskedasticity

Assumption: Normal error terms

Variable: Fitted values of lnTun

H0: Constant variance

Chi2(1) =   0.17

Prob > chi2 = 0.6819

Omitted variables for the Effect of Tax Compliance on Profitability

Ramsey RESET test for omitted variables

Omitted: Powers of fitted values of lnTun

H0: Model has no omitted variables

F(3, 161) =   1.99

Prob > F = 0.1182

Linktest for the model for the Effect of Tax Compliance on Profitability

lnTun	Coefficient	Std. err.	t	P>t	[95% conf.	interval]
_hat	1.950034	4.836107	0.4	0.687	-7.59693	11.49699
_hatsq	-0.05246	0.266872	-0.2	0.844	-0.57929	0.474372
_cons	-4.29241	21.89171	-0.2	0.845	-47.5089	38.92403

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