UNIVERSITY OF CAPE COAST

ASSESSING THE EFFECT OF TAX IDENTIFICATION NUMBER (TIN) ON REVENUE GENERATION. A STUDY IN THE UPPER EAST REGION, GHANA

GEORGE ADONGO ASUKUGA

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BY

GEORGE ADONGO ASUKUGA

Dissertation submitted to the Department of Accounting of the School of Business, College of Humanities and Legal Studies, University of Cape Coast, in partial fulfillment of the requirements for the award of Master of Business Administration degree in Accounting.

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DECLARATION

Candidate's Declaration

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

Candidate's Signature:………………………… Date:……………………..

Name: George Adongo Asukuga

Supervisor's Declaration

I hereby declare that the preparation and presentation of this 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: Stephen Asante

ABSTRACT

The study assesses the effect of tax identification number on revenue generation. The study focused in the Upper East Region. The explanatory research design, in the light of the quantitative research approach, was employed. The study used both secondary and primary data for the analyses. With respect to the sampling method, proportionate random sampling techniques were employed to select 108 participants from the accessible population. The main tool used for primary data collection for this study was the structured questionnaire containing closed-ended questions. Descriptive statistical tools such as frequency, percentage, mean, and standard deviation; and paired sampled t-test analysis, were used to analyse the study objectives. The results revealed that there was a significant difference between the revenue generated before and after the introduction of the Tax Identification Number (TIN). The results again revealed that majority of the participants agreed with the statement relative to the benefit of the tax identification number. The findings further revealed that respondents completely agreed with the statements regarding the challenges facing the implementation of Tax Identification Number. The study recommends that the government of Ghana through the Ghana Revenue Authority (GRA) should embark on a vigorous campaign or education on the need for taxpayers or potential taxpayers to register for their TIN because of its positive impact on revenue generation.

KEY WORDS

Ghana Revenue Authrity

Revenue Generation

Tax Identification Number

Upper East Region

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DEDICATION

To my family

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CHAPTER ONE

INTRODUCTION

The amount of money the government spends, mostly on the provision of political, social, and economic infrastructure of a nation, is determined by how much money it makes. A well-designed tax system is one method for generating enough income. Every country's economy depends on taxes, which are also the main source of income for development (Boadway & Eyraud, 2018). However, tax revenue has generally been moderately low in most developing economies because these nations are known for having adequate public and modern facilities (Ogbonna & Appah 2016). Thus, it is imperative for the current study to assess the effect of Tax Identification Number (TIN) on revenue generation in Ghana. This chapter presents the background to the study, the statement of the problem, the purpose of the study, research objectives, research questions, research hypotheses, the significance of the study, definitions of terms, limitations, delimitations, and organisation of the study and the chapter summary.

Background to the Study

All nations, whether developed and developing, need tax revenue to survive. To start, the central government relies heavily on taxation as tax collection is obligatory and constant, guaranteeing a steady flow of revenues (Caselli, 2023; Zhao, 2023). By funding the delivery of public goods and services, taxation aims to satisfy social and societal demands. Governments must spend money on their defense forces and legal systems in order to maintain the security and justice of society (Alam, Fawzi, Islam, & Said, 2022). Many underdeveloped countries are unable to fund large-scale programs due to a lack of tax collection relative to the Gross Domestic Product (Aizer, Hoynes, & Lleras-Muney, 2022). As a result, a rise in domestic income and a corresponding growth in public services are targets of government policy. However, rising public spending and higher taxing should be approached with caution because, beyond a certain level, distortionary taxes tend to impede economic growth. Tax bases are not simply given to governments; they may be produced or destroyed (Di-Nunzio, 2022).

Before the coronavirus pandemic started, African states were already plagued by high inequality, informality, debt, and dependence on aid (Yahya, 2023). The United Nations Agenda 2030 to end poverty, reduce inequality, build institutions, and combat climate change requires enough money, and Africa is at a time in its history when its resources are more important than ever (Brooksworth, Mogaji, & Bosah, 2023). The long-term objective of this plan is to increase prosperity for all Africans, lessen dependency on foreign aid, and strengthen weak social, economic, and governmental institutions. The ability of African tax systems to generate revenues to fund the initiatives required for sustained growth trajectories is what all of the aforementioned considerations ultimately boil down to.

In fact, because of the unpredictable nature of aid flows, the long-term growth implications of concessional loans, and the macroeconomic instability, African leaders are forced to choose between stepping up resource mobilization efforts and cutting capital expenditures, the latter of which has obviously negative growth implications (Murray & Fisher, 2022). It is critical that Africa's tax systems consistently generate enough revenue. But the Organization for Economic Cooperation and Development 2020 Income

Statistics report shows that African countries' efforts to raise tax revenue are weak when compared to those of countries on other continents (Ofori & Asongu, 2022; Mpofu, 2022). In comparison to Europe (41.1%), Asia and the Pacific (21%), and Latin America and the Caribbean (22.9%), Africa's average tax-to-GDP ratio was 16.6% (Ji, Cheng, Kannaiah, & Shabbir, 2022).

Any government that functions effectively must be able to collect taxes. This strengthens the social contract that exists between the government and its people. An important aspect of monarchs' interactions with their subjects throughout history has been taxation (Young, 2022; Rather, 2022). In emerging nations, where state development is dependent on governments' ability to collect taxes, a new study highlights the significance of this association. As was stressed at the UN Financing for Development Conference in Addis Abeba, which was attended by people outside of the academic community, mobilizing domestic revenue is essential to achieving sustainable development goals (Wolff, 2022; Abekah-Nkrumah, Assuming, & Mohammed, 2020). Domestic revenue mobilization has been a focal point of international policy debate ever since the Monterrey Consensus on Financing for Development in 2002, with the International Monetary Fund (IMF), the Organization for Economic Cooperation and Development (Lesage & Lips, 2022). The economic theory of public enforcement of tax law provides one explanation for the correlation between the emergence of states and taxation (Abdul-Jabbar & Bin-Nashwan, 2022).

Further, taxation is a dependable source of income for fostering national development (Archine, 2013). Although money alone is insufficient for any state to function, it is important, and the most dependable way to obtain it is through an efficient tax administration (Mikesell, 2013). In order to have the fiscal flexibility to finance public investments and deliver public services, governments in developing countries must increase tax revenue mobilization (Akitoby et al. 2020). Every country has two options for generating revenue: internally or externally (through borrowing). Borrowing comes with debt payment, while generating income internally through taxation causes displeasure for the citizenry (Attobrah, 2020). The capacity of a nation to raise sufficient funds affects its capacity to ensure the welfare and security of its citizenry as well as the development and maintenance of representative democracy.

Taxation is the most effective internal revenue source for development projects in poor countries like Ghana. Tax income and economic growth in emerging nations go hand in hand (Peprah, Abdulai, & Agyemang-Duah 2020).). Revenue mobilization to finance development has been, and continues to be, a significant concern in Ghana, just like it is in other developing countries This has resulted in a consistent budget deficit operation in all developing economies over the years (Attobrah, 2020). The most common and largely relied-on means to secure funds internally for infrastructural development and other long-run investment by the government is taxation. Taxation involves imposing charges and levies on the incomes of persons and companies by the government for a period of time, year by year, or more than any other period as the law may define (Frimpong, 2021). A tax is a statutory payment made by the government on the earnings of individuals and businesses.

It is also used to manage the balance of payments, reduce inflation, and boost economic growth (Arbetman & Kugler 2019), in addition to serving as a fiscal policy to advance specific economic goals of the government, such as employment creation. Tax revenue mobilization is a significant priority for policymakers in many nations. While some countries have seen significant gains in their tax-to-GDP ratios, others have seen little or no change over long periods. While some countries have seen significant gains in their tax-to-GDP ratios, others have seen little or no change over long periods (Akitoby et al., 2020). Enhancing tax revenue mobilization is critical for governments to provide budgetary flexibility to fund public investment and deliver public services, particularly in developing nations (Akitoby et al., 2019).

The most crucial responsibility of all governments is to create the conditions that allow their people to have fulfilling lives and to have equal opportunities to realize their full potential (Sabet & Khaksar, 2020). Governments must provide a wide range of public goods and services, including inexpensive healthcare, first-rate public transportation, potable water, safe roads, and effective educational systems, among many others, in order to fulfill this crucial responsibility (Kumar, 2019; Ndiritu & Engola, 2020). To do this effectively, governments require money, and a major source of government funding is tax revenues (Adama, 2018; Birungi & Colbourn, 2019).

Regrettably, the idea of tax evasion has made it difficult for governments to properly use tax revenues for the ongoing supply of high-quality public goods and services (Eja, Idaka, & John, 2018; Das, 2019). According to Bott, Cappelen, Sørensen, and Tungodden, (2020) and Abdul, Zubairu, and Abubakar, (2021), tax evasion is a crime that involves people or organizations knowingly choosing not to pay the full amount of taxes they are required to (Bott et al., 2020; Abdul, Zubairu, & Abubakar, 2021). It is exceedingly difficult to pinpoint exactly how much tax income is lost globally due to tax evasion because it is frequently a covert act, although estimates place the figure at $500–650 billion per year (Tax Justice Network, 2020).

Governments all around the world have therefore made combating tax evasion a top priority (Boolaky, Mirosea, & Singh, 2018; Andoh, Osoro, & Luvanda, 2019). Typically, these strategies involve attempts to improve the ability of tax authorities to discover tax evasion attempts (Peprah, Abdulai, & Agyemang-Duah, 2020), increasing the severity of penalties for entities caught and convicted of evading taxes (Chiarini & Marzano, 2019) and attempts to improve voluntary tax compliance by citizens by increasing their tax knowledge and convincing them of the societal benefit of paying taxes (Amponsah, Isshaq, & Agyapong, 2019).

One such policy is the introduction of unique tax identification numbers (TIN) which allows governments to be able to create a database of taxable entities and track to what extent each entity pays its taxes (Koessler et al., 2019; Nagel et al., 2019; Fjeldstad et al., 2020). This strategy is also utilized to make tax evasion less attractive by requiring taxable entities to provide their TIN before they can have access to basic services such as the ability to open business bank accounts, access loans from banks, access tax incentives and tax certificates, register official motor vehicles and even to rent or purchase office space (Vu, 2018; Elgin & Erturk, 2019; Olivares, 2020).

Statement of the Problem

Over the years Ghana has had to uphold tax structures flawed by tax avoidance and evaders. Olatunji, & Oludayo (2018) confirmed that the imperfections of the tax structures could be attributed to the lack of electronic means to record basic information of the taxpayers accurately so as to collect taxes from them when due without any problem. Though the governments, through some established authorities for instance the GRA, combated non-compliance with tax laws in time past, those efforts were not productive enough because of the absence of a working system that monitors the information and payments of taxpayers. To address this menace, the central government embarked on a series of reforms to promote the efficiency and effectiveness of tax administration, one of the outcomes is Tax Identification Number (TIN) which was introduced in 2017.

However, there are few studies in this context, and most of such studies were conducted outside Ghana, for instance, Asaolu, Dopemu, and Monday, (2015), Oladejo & Tomilola, (2021), Olagunju, (2020), Ofurum, Amaefule, Okonya, and Amaefule, (2018), and Irefe-Esema, and Akinmade, (2020). One thing that stands out from the studies reviewed is that TIN has the capacity to improve revenue generation. Although the studies were different in terms of geographical location, method of analysis, and time, the findings were not disaggregated. This connotes that TIN has an inbuilt mechanism through which individuals and firms are brought to the tax net.

Considering the foregoing, it is obvious that there is a gap in the literature as far as Tax Identification Number (TIN) and revenue generation in Ghana are concerned. Thus, it is indisputable that a study is needed to fill these gaps. It is based on this background and all the issues advanced that the focus of the current study will be to assess the effect of Tax Identification Number on revenue generation in the Upper East Region, Ghana.

Purpose of the Study

The purpose of this study is to assess the effect of Tax Identification Number (TIN) usage in revenue generation. A study in the Upper East Region, Ghana.

Research objectives

The specific objectives of the study were to:

1. analyse the difference in revenue raised before and after the introduction of Tax Identification Number in the Upper East Region.
2. examine the benefits of the usage Tax Identification Number (TIN) in revenue generation.
3. identify the challenges facing the implementation of Tax Identification Number (TIN).

Research Questions

The following research questions have been formulated to help achieve research objectives one, two, and three.

1. what is the difference in revenue raised before and after the introduction of Tax Identification Number in the Upper East Region?
2. What are the benefits of Tax Identification Number (TIN) in revenue generation?
3. What are the challenges facing the implementation of Tax Identification Number (TIN)?

Significance of the Study

The findings of the study will provide numerous benefits for policy makers like the GRA, taxpayers, academicians, and the nation as a whole. The findings will assist policy makers like the government to come out with appropriate policies that will help improve the Tax Identification Number system which will directly help improve revenue generation for the government. The study would also help taxpayers to plan their tax returns adequately. This current study would also help reduced tax compliance cost, tax evasion and prevent unnecessary tax avoidance. The study will also contribute immensely to literature and theory, as the main focus of the entire study is to fill gaps in literature and contribute to theory building. The study will provide a basis for further studies, as it will highlight related and other necessary researchable areas.

Delimitation of the Study

In general, the study is limited in scope to the impact of tax identification number on revenue generation in the Upper East Region. The study was also limited in scope to the study variables such as the difference in revenue raised before and after the institution of Tax Identification Number in the Upper East Region, the benefits of tax identification number in revenue generation, and the challenges facing the implementation of tax identification number.

Limitations of the Study

This work, just like most works, had limitations. Descriptive statistics are limited in that they can only be utilized to produce summaries about the people or objects you've measured. You cannot generalize the information you've gathered to other populations. Furthermore, because the work was strictly quantitative, only closed-ended questions were employed. This may have prevented participants from responding, which may have added to the work's value. The use of a closed-ended questionnaire has the potential to be affected by biases due to the inclusion of biased statements in the measuring instrument, thereby distorting the work findings. Many persons were reluctant to take a few minutes to fill out a survey. Even if it was for the cause of work, some people were hesitant to devote their time. This reduced their return rate to 70%. Nevertheless, the researcher ensured that elements that could further influence the reliability of the findings were held at bay by sticking strictly to the scope defined, under delimitation, for the study.

Organisation of the Study

The study was organised in five chapters. The introduction, which was the Chapter One, highlighted the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, delimitation of the study, limitation of the study, and organization of the study finally, the chapter summary. In the Chapter Two, the underpinning theories, concepts and related empirical studies were reviewed, as well as the conceptual framework. Chapter Three discussed the research methods employed for this study. Chapter Four focused on analysis and discussion of results. The final chapter, Chapter Five, concluded the dissertation by highlighting the summary, key findings, conclusions, and recommendations as well as suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter focused on the review of related literature. The chapter focuses on the theoretical framework which discusses the underpinning theory for the study. Also, concepts were reviewed in this chapter. The concepts reviewed include Tax Evasion, the Concept of Taxpayer Identification Number, Tax revenue. Related empirical studies were also reviewed and discussed. The conceptual framework was also presented to guide the entire study. The conceptual framework presents the relationships, to be tested, between tax identification number and revenue generation. Finally, the chapter summary was presented.

Theoretical Review

To well situate this study in literature, two theories have been employed to underpin the study. These theories have been comprehensively tuned to accommodate the main study concepts and help explain the relationships hypothesized between the concepts. The theories employed are the Ability to Pay Theory (Kendrick, 1939) and the Laffer Theory of Taxation (Laffer, 1979). These two theories were employed due to their close links to the study hypotheses. These theories are discussed in detail below;

Ability to pay theory

On the basis of equitable sacrifice, justice is established through the use of the theory of willingness to pay. It suggests that each taxpayer is responsible for bearing an equivalent share of the financial burden of paying taxes (Richter, 1983). In its most fundamental form, the equity theory, also known as the theory of fair sacrifice, asserts that individuals who are otherwise identical must be treated equally, i.e., they must be considered reasonably taxable persons. The term for this concept comes from the field of taxation and is called horizontal equity. According to the principle of vertical equity in taxation, individuals must be taxed unequally in order to equalize the burden for individuals with unequal taxpaying capacity. This is because people are taxed unequally to equalize the burden.

As such, people with high income are more likely to pay more to government than those with small income (Richter, 1983). This principle validates the argument for progressive taxation. Though there are many variants of the ability-to-pay theory, none of them could give an explicit "ability" definition. In all, income has indeed been regarded as a key measure of willingness to pay, though associations of earnings have also been deployed to a smaller degree (Richter, 1983).

Thus, based on the equity theory, the study expects a positive relationship between income and tax compliance as a rise in income levels will result in a higher level of tax compliance. Another important variable in the ability to pay is tax rate. If tax rate is high, the tax payers will be less able to pay. On the other hand, if tax rate is low, the tax payers will be abler to pay. Therefore, tax rate and tax compliance have positive relationship.

Laffer theory of taxation

Laffer's theory of taxation, popularly known as the "Laffer Curve." is a hypothetical depiction of the connection between tax revenue raised by government and all possible rates of taxation. It considered that at extreme tax rates, no revenue would be raised. This is because, at an extreme tax rate, taxpayers have no reason to earn income again. In the same vein, a very low tax rate will produce unreasonable tax revenue and the main purpose of tax revenue will not be achieved. It, therefore, follows that there must exist at least one rate in between where tax revenue would be a maximum (Olatunji & Oludayo 2018).

The Laffer Curve is a theoretical explanation of the relationship between tax rates set by a government and the tax revenue collected at that tax rate. It was introduced by American supply-side economist, Arthur Laffer. The concept was not invented by Laffer; there were other antecedents from the 14th-century writings of Ibn Khaldun. The Laffer Curve says that there is no tax revenue collection at the two extreme tax rates of 0% and 100%. However, there is one optimal tax rate between both these extremes that maximizes tax revenue collection. One of the theory's main assumptions is that if taxation on a certain activity, such as production, is increased beyond a certain point, less of it is produced. Beyond the optimal tax rate, workers start to believe that their extra efforts are resulting in lower additional income. Thus, they work less, income falls, and tax collection decreases.

Laffer brought his concept to the attention of policymakers in 1974 when the general approach of most economists was a Keynesian one. They advocated more government spending to stimulate demand, which in turn meant more taxes. The policy was proving to be ineffective and Laffer asserted that the problem was not because of too little demand but due to the burden of heavy taxes and regulations that left producers without incentive to produce more. Tax rate cuts affect revenues in two ways. Every tax rate cut translates directly to less government revenue but also puts more money in the hands of taxpayers, increasing their disposable income. In the long term, business activity increases, companies hire more, who in turn spend more, and this leads to economic growth. The growth creates a larger tax base and generates higher total tax revenue.

A higher tax rate increases the burden on taxpayers. In the short term, it may increase revenues by a small amount but carries a larger effect in the long term. It reduces the disposable income of taxpayers, which in turn, reduces their consumption expenditure. Aggregate demand in the economy falls and producers create less. This leads to higher unemployment. The tax base for the government falls and so does its tax revenue.

Conceptual Review

This section of the chapter reviews the main concepts of the study. Specifically, Tax Evasion, the Concept of Taxpayer Identification Number, Tax revenue were discussed in details:

Tax system

Taxation is a source of government revenue that is used to finance expenditures generated by imposing charges on citizens and corporate entities (Bindabel, 2017). Tax is one of those things that are levied in almost every country of the world, unavoidable, and at the same time, dynamic and intriguing. While taxes are presumably collected for the welfare of taxpayers as a whole, the individual taxpayer's liability is independent of any specific benefit received. According to Olatunji, and Oludayo (2018) a well-designed tax system can help governments in developing countries prioritize their spending, build stable institutions, and improve democratic accountability. A good tax system is expected to be rational, fair, unbiased, and even nondiscriminatory in nature and practice. Therefore, a fair tax system should contain good qualities and attributes that distinguish it from bias and lack of credibility. A tax system that is fashioned in improving the challenges of tax administration and tax laws has a better chance of maximizing efficiency.

Historical background to taxation in Ghana.

Ghana's tax system dates back to the colonial era when it had little to do with the actual circumstances or goals of the nation. During the colonial era, modern taxes were introduced to Ghana. But before taxes took this form, some taxes were gathered by overlord chiefs involved in expanding their empires. They waged a campaign of conquest and established their rule over the tribes they defeated. Such empire builders included the Ashantis, Akyems, Akwamus, and Denkyira, among others. The pattern was that of lands changing hands, and depending on who took over, the new ruler came with his own methods of levy imposition; such impositions were mainly with respect to land taxes occurring at the early stages of the 18th century before colonial rule(Aboagye, & Hillbom, 2020).

The British employed chiefs as collectors of the same land taxes, the "land poll" being the most well-liked. The Customs Department was in charge of collecting and administering these fundamental rates as well as quasi-duties from shipping corporations at the ports. Modern taxation, in the form of an income tax, was not really implemented in Ghana until 1943. This was done to aid the colonial power's war effort during the Second World War. During the governance of Major Hill in 1852, the British colonial masters had insisted that the establishment of schools, improvement in the judicial system, basic health care, and infrastructure had to be borne by the imposition of direct and indirect taxes. This was met with great resistance by the local people culminating in the withdrawal of the direct taxes (Agyeman, 2005).

Tax revenue

According to Ironkwe, and Gbarakoro, (2019), a tax is a levy that the government, which includes the state, and local governments, must impose on the properties, products, services, and incomes of taxpayers. The government imposes taxes as a legal requirement and a necessary duty on people and businesses in order to finance operations, operate public utilities, and fulfill other social duties. As a result, taxes become the government's main source of income. Taxes are a way for the government to impose essential levies on all of the properties, goods, services, and income of people, businesses, firms, corporations, etc. (Yahaya & Bakare, 2018).

Tax revenue is an essential component of efforts to create societies, economies, and even whole nations. It is not merely the primary source of income for the government. Misuko, (2019) said that in light of this, taxes enable the provision of securities, meet basic necessities, or foster economic growth in addition to validity and agreement (helping to enhance democratic, accountable, and representative government). Every good citizen wants to boost the reputation of his or her society, so tax compliance should not be required. However, it has come to light through time that purposeful tax evasion has become a major problem in every civilization on the globe (Kiow, Salleh, & Kassim, 2017).

Taxes can be classified majorly into two: direct and indirect taxes. Direct taxes are a form of taxes collected basically on the wealth and income of individuals and companies. These include Personal Income Tax (PIT), Company Income Tax (CIT), Petroleum Profit Tax (PPT), and Capital Gain Tax (GTA). Indirect tax is a form of tax collected on goods and services payable only when such goods and services are bought e.g. Customs and Excise Duties (CED) and Value Added Tax (VAT) (Akinleye, Olaoye, & Ogunmakin, 2019).

Concept of taxpayer identification number

According to Akinleye, Olaoye, & Ogunmakin, (2019), TIN helps to accelerate the processing of information for taxpayers and also fosters enforcement, awareness, and increase revenue generation. This is supported by Akinleye, Olaoye, and Ogunmakin, (2019), who deduced that TIN promotes agreement and coordination of taxpayers' identification system that is based on a mechanized system. TIN connects the space between the information of taxpayers and the history of their payments thereby increasing their obedience level (Yusuf, 2022). Taxpayer identification number (TIN) is a system that aids taxpayer identification and registration, thereby minimizing mistakes and errors accompanied by registering manually and strengthening existing weaknesses in the tax system of the country. TIN is an electronic system for taxpayers' registration and it permits easy identification of taxpayers and is available for everybody (Ojo, Ojo, Ajiboye, Olaiya, Akawa, Olaoye, & Oyinloye, 2018).

Tax evasion

Tax evasion is simply the deliberate attempt by individuals, business entities, trusts, and other institutions to evade their taxes and fail to declare the true and fair worth of their revenues (Chaffee, & Davis-Nozemack, 2017). Tax evasion is defined as intentional wrongdoing or as behavior that directly violates tax rules, standards, and ethical principles addressing the citizenry's duty to avoid paying taxes.

Tax evasion is clearly demonstrated by the willful understatement of income and the excessive claim of a tax deduction (Yusuf, & Nuhu, 2021). Tax evasion was described by Oladejo and Tomilola, (2021) as the deliberate and intentional practice of concealing all taxable income. If the tax rate owed by a taxpayer is not paid after the minimal time frame, it is against the law (Fagbemi, Olaniyi, & Ogundipe, 2019). Tax evasion is clearly demonstrated when people reduce, make, or declare misleading representations about their revenue tax liabilities by taking advantage of flaws in the tax rules and regulations. Tax evasion is caused by various factors that encourage and make taxpayers act toward evasion has been identified by various studies and authors among are; (Vythelingum, Soondram, & Jugurnath, 2017) suggested the following as causes of tax evasion in many countries such as unfair distribution of facilities (amenities), poor management and misuse of tax collected and lack of essence of civic responsibility.

Corruption in public office, inadequate tax education and awareness, misappropriation of taxes collected, ignorance of the tax authority, lack of adequate enforcement for default, the proliferation of taxes, loopholes in the tax laws, unequal distribution of income, the absence of "Quid Pro Quo," or something of value given in return (by the government), a high level of illiteracy, and high tax rates are additional causes of tax evasion (Temesgen, 2018).

However, tax evasion has had a number of negative fiscal impacts, and there are at least three causes that are responsible. Fjeldstad, Kagoma, Mdee, Sjursen, and Somville, (2020) assert that income losses due to non-compliance and corruption become serious in the first place when there is a sizable budget deficit. Second, because differing chances for tax evasion may result in varying effective tax rates that individuals must pay, horizontal and vertical equity suffers (Kumi-Dumor, 2022). Coglianese, Davis, Kilian, and Stock, (2017) emphasized once more that equity may be one of the major negative effects of tax avoidance. There is horizontal and vertical inequity where in both forms of inequity, the higher-taxed person pays for the lower-taxed person since, had there been no tax evasion; the tax rates would have been lower under the premise of revenue neutrality. Third, there is a growing concern about the expanding underground economic activities, and how these activities affect economic policies (Goel, Saunoris, & Schneider, 2019). The acts of corruption by tax collectors often play a role in promoting or sustaining underground economic activities and in facilitating tax evasion (Tanzi, 2018).

Tax avoidance

Tax avoidance is the deliberate act of a taxpayer to pay less than he should to the tax authority. It can be simply defined as the reduction or minimization of a person's tax liability by carefully arranging one's affairs in order to take advantage of loopholes in the tax law provisions. It's allowed. Professor Wheatcraft noted that "tax avoidance is an art of winning games without actually cheating; thereby beating the internal revenue and the Government to their own game" while researching how the courts and the legislature view tax avoidance. In a similar vein, Lord Tomlin stated on tax avoidance in Ire v. Duke of Westminster, "Everyman is entitled, if he can, to manage his business so that the tax attaching under the proper act is less than it otherwise would be. He cannot be forced to pay a higher tax if he is successful in ordering them in a way that achieves this purpose, regardless of whether Inland Revenue or his fellow taxpayers benefit from his cunning.

Tax avoidance, according to Kipilimba, (2018), is the legal decrease of tax liabilities through actions that fully exploit the tax system, such as income splitting, tax deferral, and tax arbitrage between incomes that are subject to various tax treatment regimes. Tax avoidance goes beyond the employment of tactics that make it possible to take advantage of legal loopholes or ambiguities (aggressive tax planning tactics). When a taxpayer sets up his financial affairs in a way that would result in his paying the least amount of tax without breaking the law, this is considered tax avoidance. In a nutshell, it is a term used to describe the numerous strategies employed to reduce taxes and protect the income of taxpayers from higher obligations that would have otherwise been imposed (Kipilimba, 2018). Akinleye, Olaoye, and Ogunmakin, (2019) defined tax avoidance as the taxpayers' decision to avoid being caught by the law by structuring their firm in a way that partially or completely exempts them from tax liability.

Empirical Review

A number of studies looked at the determinants of savings behaviour of people. For instance, Kipilimba, (2018) studied the effects of tax administration on government revenue in Tanzania in the case of the Dar es Salaam region using questionnaires distributed to 85 targeted respondents to gather the necessary data. According to the study's conclusions, effective tax administration in Tanzania is primarily enhanced by good tax design, effective tax policy, and laws, tax administrative structure, tax collection methods, proper use of a computerized system for maintaining taxpayer registers, outsourcing revenue collection to private tax collectors, internal and external capacity building, intensive coordination with other entities, and proper maintenance of taxpayer's records. This research was carried out in Tanzania, while the current study aims at buttressing the Ghanaian perspective as regards tax administration and revenue generation relative to the impact of Tax Identification Number (TIN) on revenue generation in Ghana.

Ofurum, Amaefule, Okonya, and Amaefule, (2018) evaluated the impact of E-Taxation on Nigeria's revenue and economic growth. The study made use of secondary data sourced from the Federal Inland Revenue Service, and Central Bank of Nigeria Statistical and Economic Reports on a quarterly basis from the second quarter of 2013 to the fourth quarter of 2016. Findings revealed that Federally Collected Revenue and Tax-to-GDP ratio significantly decreased after e-taxation was implemented. Also, Tax Revenue decreased after the implementation but the mean difference was not statistically significant. Soetan (2017) investigated the impact of tax administration on the collection of tax income in Nigeria. A structured questionnaire was created and utilized to collect data for this study, which used a survey research design as its methodology. The survey included one hundred and twenty-six (126) respondents. With the aid of the SPSS application, the data were processed, and descriptive statistics as well as simple regression statistical procedures were applied to the data analysis. According to the study, tax administration in Nigeria does not significantly affect the amount of tax income generated.

Ogbonna and Appah (2016) investigated how tax administration and revenue impact Nigeria's growth in the economy. Data was gathered from both primary and secondary sources. While the primary source was a well-designed questionnaire, the secondary sources were academic publications and journals. Regression analysis that was pertinent was used to analyze the data collected. The findings showed a significant correlation between personal income tax revenue (PITR) and per capita income, corporate income tax revenue and Nigeria's GDP, VAT revenue and PCI, petroleum profit tax revenue and Nigeria's GDP, and tax administration and Nigeria's GDP. Asaolu, Dopemu, and Monday (2015) used time series quarterly data between the years 1999 and 2012 from the Tax Payer Statistics and the Revenue Status Report of the Lagos State Internal Revenue Service (LIRS) to evaluate the effects of tax reforms on revenue generation in Lagos State of Nigeria. OLS regression techniques were used to analyze the data that were collected. According to the findings, there was a long-term correlation between Lagos State's revenue production and tax reforms; as a result, the tax reforms had a favorable and considerable impact on the State's revenue structure.

Oladejo and Ogunseye (2021) examined the effectiveness of Taxpayer Identification Numbers in combating tax evasion in Nigeria (a case study of AkwaIbom State Board of internal revenue). The related literature was reviewed. The population of the study comprises the total revenue before TIN (TRBT), total revenue after TIN (TRAT), internally generated revenue before TIN (IGRBT), and internally generated revenue after TIN (IGRAT). A number of statistical tools including descriptive statistics, correlation analysis, and Auto Regressive Distributed Lag (ARDL) Model were used to analyse the data and test the hypotheses formulated.

The (ARDL) Model revealed that the internally generated revenue (IGR) before the introduction of TIN between (1997-2007) was not significant. Also, it was revealed that the introduction of TIN (2008-2018) has witnessed a tremendous increase in internally generated revenue in Akwa Ibom State, rejecting the null hypothesis that TIN does not militate against tax evasion in Nigeria (a case study of AkwaIbom State board of internal revenue). The study recommended that a holistic tax education should be carried out in order to keep the teeming taxpayers abreast of the Taxpayer Identification Number programme in the state and also more registration centers should be created for ease of access and registration of taxpayers for the taxpayer identification number programme as opposed to one and only registration center in Uyo to consolidate the TIN programme in the State.

Ezugwu and Agbaji (2014) investigated how Kogi State's internally generated revenue was affected by the use of taxpayer identification numbers. A review of relevant literature was conducted. Internally Generated Revenue Before TIN (IGRBT), Internally Generated Revenue After TIN (IGRAT), Total Tax Revenue Before TIN (TRBT), and Total Tax Revenue After TIN (TRAT) make up the study's population. Tables and regression were among the statistical methods used to analyze the data and assess the hypotheses that were developed. Their data study showed that, prior to the implementation of TIN (2003–2007), internally generated revenue (IGR) was insignificant. Additionally, it was disclosed that Kogi State has seen a substantial boost in internally produced revenue after the implementation of TIN (2008–2012).

They recommended that a holistic tax education should be carried out in order to keep the teeming taxpayers abreast of the Taxpayer Identification

Number programme in the state and also more registration centers should be created for ease of access and registration of taxpayers for the taxpayer identification number programme as oppose to the one and only a registration center in Lokoja to consolidate the TIN programme in the State. It was reported in Oviedo (2009) that the number of registered taxpayers increased tremendously.

Akinleye, Olaoye, and Ogunmakin (2019) examined the effect of tax identification number on revenue generation in southwest, Nigeria. The expost facto research design was adopted and the population covered all the states in the Southwest geopolitical zone of Nigeria, out of which three states namely Ekiti, Osun, and Ondo States were selected as the study elements using simple random sampling techniques. Quantitative secondary data were sourced from the State Board of Internal Revenue of the sampled states spanning from 2008-2017 for a period of 10 years segregated into Pre-TIN (2008-2012) and post-TIN (2013-2017). The analysis used to mean and sampled paired t-tests to reveal that there was a positive and significant difference between the internally generated revenue of the sampled states before and after the introduction of TIN. The paper concluded that TIN has improved revenue generation in Southwest, Nigeria. The study recommended that intermittent checks of all the platforms related to TIN should be carried out so as to detect and prevent abuse and other fraudulent activities. It was equally recommended that regulatory agencies of the government should enlighten taxpayers on the benefit of Tax Identification Number to improve revenue generation. More evidence revealed that the implementation of TIN could improve revenue generation. After the consideration of different studies, it has been observed that most of the studies did not focus on the assessment of TIN as a tool to reduce tax evasion in Ondo State, Nigeria which is the focus of this study.

Tyokoso, (2021) looks into how Ekiti State's internal income generation changed between 2006 and 2015 as a result of the TIN adoption. The study finds that the implementation of TIN has a substantial positive link with the generation of internal income in Ekiti State based on the results of the regression analysis. The impact of TIN on the generation of internal income in the states of Ekiti, Osun, and Ondo from 2008 to 2017 is examined by Akinleye et al. (2019). After the introduction of TIN, significant differences were found in the internal revenue generation between the three states, according to the results of secondary data analysis utilizing paired sample t-tests.

Iheduru and Ajaero (2018) use a comparative technique and the paired sample t-test as their data analysis tool to determine the impact of TIN implementation on Nigeria's non-oil tax income from 2000 to 2015. Findings from the study demonstrate that after TIN implementation in Nigeria, there are significant positive differences in overall non-oil tax revenue, firm income tax revenue, and tertiary education tax revenue, whereas value-added tax revenue declined but not significantly. The study's theoretical foundation is the tax compliance theory, which demonstrates that encouraging voluntary tax compliance is the main goal of any tax reform. Tax authorities use tax revisions as real tools to increase the government's ability to collect taxes. The purpose of the TIN was to encourage more eligible Nigerian taxpayers to register and pay their taxes on time. Therefore, tax compliance theory serves as the foundation for evaluating TIN's influence on Nigeria's tax revenue generation.

Mehrara and Farahani (2016) wrote on the effect of tax evasion and government tax revenues on economic stability in OECD countries using data from 1990-2013, however, they used panel data to estimate the results and it showed that tax evasion and the income tax rate has a U shape relationship. That is as tax rates increase the probability of tax evasion would also increase. They found that tax evasion led to economic instability and more tax revenues will be beneficial to a better economic condition.

Adebisi, and Gbegi, (2013) looked into how tax avoidance and evasion affected the way personal income taxes were administered in Nigeria. They collected data from a sample of 305 employees of the Federal Inland Revenue Service Abuja and used Analysis of Variance (ANOVA) to test their hypotheses. Their study's conclusions showed that high tax rates encourage tax evasion and avoidance, personal income tax generation has not been particularly impressive, and personal income tax rates are too high. These findings suggest that enlightenment and the proper use of tax revenue on public goods will deter these actions.

Ibadin and Eiya (2013) used a few selected states in the Nigerian geopolitical region to study the tax evasion and tax avoidance behavior of the self-employed. The regression technique known as Ordinary Least Squares (OLS) and Analysis of Variance (ANOVA) was used by the authors. According to their findings, respondents believe that occasionally evading taxes is morally acceptable, and there is a substantial correlation between tax evasion and avoidance, as well as the ethical perspective, the way taxes are administered, and cultural patterns among the self-employed.

Jacob, (2014) carried out studies on the impact of tax evasion and avoidance on Nigeria's economic growth. He used a survey study design, and 150 Nigerians, both tax payers and tax evaders, were given a well-structured questionnaire to complete. He discovered that tax avoidance and evasion had harmed Nigeria's economic growth and development. Through the distribution of 160 questionnaires to a chosen group of self-employed people in Edo State, Modugu and Omoye (2014) assessed the evasion of personal income tax in Nigeria and collected primary data. They discovered that the interaction between taxpayers and the taxing authorities and lax penalties have a big impact on tax evasion in Nigeria.

Olabisi (2010) examined the causes and impacts of tax avoidance and evasion in Lagos State. He collected primary data through 127 questionnaires that were sent to the state's personal income taxpayers. He conducted a chi-square analysis of the data. His findings showed that the tax administration in Lagos State is incredibly unproductive and inefficient and that there is not enough information on the state's taxpayers.

Additionally, Uadiale, Fagbemi, and Ogunleye (2010) investigated the connection between Nigerian culture (represented by the application of the law, confidence in the government, and religion) and personal income tax evasion. They calculated the connection between tax evasion and independent factors using chi-square statistics and ordinary least-squares regression. They discovered that law enforcement and public confidence in the government reduce personal income tax avoidance in Nigeria.

Conceptual Framework

A conceptual framework is defined as the conceptualization of the relationship between variables in the study and showing the graphical or diagrammatical relationship between the variable by the researcher (Mwathi, & Karanja, 2017). It enables the quantitative analysis, operation, collection of data, and measurement of the various variables identified by the researcher (Antwi, & Hamza, 2015). According to Blumberg, Cooper, and Schindler, (2014), a conceptual framework affords the researcher the opportunity to also bring up the various variables in the study. However, drawing from the theories and empirical studies reviewed, the researcher constructed the conceptual framework in Figure 1.

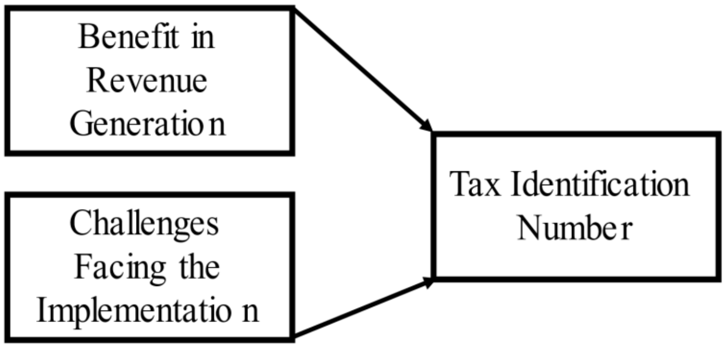

Figure 1: Conceptual Framework

Source: Author's construct (2023)

Chapter Summary

This chapter highlighted the definitions of key concepts, followed by the theories on which this study is based. Additionally, the chapter presented the studies of previous related literature on tax identification number. It also presented the conceptual framework regarding this study. This chapter however, concluded by looking at the various write up other researchers have made on tax compliance, which included literature in the Ghanaian contest. The gap analysis was captured from the Ghanaian literature perspective and how this study seeks to address.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter presents information on the following: research philosophy, research approach, research design, study area, the population of the study, sample size and sampling procedure, data collection instruments, data collection procedure, data processing and analysis, ethical issues, and chapter summary. The research design focused on the research paradigm employed, research approach, and methods. The study area focused on the research setting.

Research Philosophy

The philosophy of a study refers to the epistemological and ontological perspectives from which the researcher perceives and comprehends reality (Varghese & Edward, 2018). Research philosophy is essential as it enables the researcher to discern where to situate the study in the research domain and also serves as a major determinant of the research methodology (Njuguna, 2014). Accounting research is disciplinary and has the characteristics of both natural and social sciences and as such can rely on several philosophies from economics, social, physical and natural sciences such as pragmatism, realism, interpretivism, functionalism, radical humanism, radical structuralism and positivism (Luft & Shields, 2014).

Positivism, which has been one of the pillars of the quantitative research approach, believes that reality or phenomenon could be objectively investigated and universally proven under similar circumstances (Bindabel, 2017). The positivist empirical approach relies on the scientific method to predict and explain accounting events and represents a deviation from the normative approach to accounting that argues how accounting ought to be practiced. Positivism assumes the position of a natural scientist and involves dealing with observable economic reality whose outcome could be a law-like generalisation similar to those in the natural sciences. Therefore, the researcher undertakes the study under the inspiration and guidance of the principles of positivism.

Research Approach

This study adopts the quantitative research approach. Quantitative research is explaining phenomena by collecting numerical data that are analyzed using mathematically based methods in particular statistics (Sim, Saunders, Waterfield, & Kingstone, 2018). Quantitative research provides precise and numerical data; provides overall descriptions of situations or phenomena; is useful for studying large populations and its findings are relatively independent of the researcher (Bindabel, 2017). The research made use of the survey procedure to collect quantitative data for analysis. Similarly, Croasmun, and Ostrom, (2011) state that quantitative research relies on the collection and analysis of numerical data to describe, explain, predict, or control variables and phenomena of interest. In a similar view, McCusker, and Gunaydin (2015) state that the quantitative research approach depends on the objective of estimation, factual, and numerical analysis of data gathered through surveys.

In this regard, the present study used a questionnaire to gather numeric data in pursuit of the objectives of the research. Justifying its relevance in this study, Luft, and Shields, (2014), argues that quantitative research has two main advantages. First, it is conducted and assessed quickly, and results are tabulated within a brief period. Secondly, it is more likely to be valid and reliable if the results obtained through a quantitative approach are thoroughly and legitimately gathered (Bindabel, 2017). Additionally, the use of the quantitative approach is well-matched with the study's problems and its questions; and it supports this study to succeed and collect empirical evidence. Furthermore, one quality of quantitative research, according to McCusker, and Gunaydin, (2015), is the requirement that the sample used must reflect the attributes of the target population, which implies that in quantitative studies, representativeness is always crucial hence the use of strict probability sampling procedure in selecting the sample for the study.

Research Design

Both descriptive and explanatory research design was deemed appropriate for the effectiveness of this study. An explanatory design, also known as a causal design, is a research design that seeks to investigate a problem or a situation by establishing a cause-and-effect relationship amongst variables of concern. Explanatory research designs enhance the understanding of the researcher on the issue at hand though it does not provide conclusive outcome (Luft, & Shields, 2014). Additionally, explanatory research commonly makes use of primary data. It also set precedence for future research to advance the usefulness of findings.

Thus, explanatory research allows the researcher to elicit deep insights on a particular subject. Nonetheless, explanatory research design has been challenged with misleading conclusions and unrepresentative samples. For example, perceived cause and effects obtain from explanatory studies may be coincidence other than an established truth. Mindful of these limitations, however, the study will still be proceeded with an explanatory design so as to make room for the creation and testing of theories, and to set a foundation for future research on such a novel phenomenon.

Study Area

The Upper East Region is located in north Ghana and is the third smallest of the 16 administrative regions in Ghana. It occupies a total land surface of 8,842 square kilometers or 2.7 per cent of the total land area of Ghana. The Upper East regional capital is Bolgatanga, sometimes referred to as Bolga. Other major towns in the region include Navrongo, Paga, Bawku and Zebilla. Upper East Region is bordered by Burkina Faso to the north and Togo to the east. It lies between longitude 0° and 1° West, and latitudes 10° 30′N and 11°N. The region shares boundaries with Burkina Faso to the north, Togo to the east, Upper West Region to the west, and the Northern Region to the south. The Upper East Region is divided into 15 districts, each headed by a district chief executive.

Population

According to Agyedu, Donkor, and Obeng (1999), a population is "a complete set of individuals (subjects), objects, or events having common observable characteristics in which the researcher is interested." They went on to say that the researcher needed to have a crystal-clear understanding of the purpose of the study and that they needed to be able to identify it. The term "target population" refers to members of the overall population from which the researcher intends to select a representative sample for the purpose of conducting an investigation (Cohen, Manion, Morrison, & Morrison, 2017).

According to Croasmun, and Ostrom, (2011), the term "research population" refers to the larger group from which a researcher intends to draw the study's sample. In other words, the research population is the population from which the researcher will draw the sample. The population of the study consisted of 150 respondents, which included all GRA Staff in the 15 MMDAs in the Upper East region of Ghana.

Sampling Procedure

The study adopts the sample size formula for a finite population proposed by Krejcie and Morgan (1970). With a population proportion of 50% and a confidence level of 95%, a sample size of 108 was appropriate for a finite or known accessible population of 108. Krejcie and Morgan argue that there is no need using sample size determination formula for ‘known’ population since the table has all the provisions one requires to arrive at the required sample size. With respect to the sampling method, proportionate random sampling techniques were employed to select participants from the sample identified. The sampling method was chosen due to the homogenous characteristics relative to tax identification number and revenue generation in the Upper East Region. Also, the random sampling method allowed for respondents to have equal and independent chances of being selected from each of the MMDAs in Upper East Region, making it more scientific, accurate, and representative.

Data Collection Instrument

Every research work must have its data traceable to a particular source or sources. To achieve the objectives of the study, data would be gathered from primary sources. Primary data sources encompass data sources originally obtained by the researcher in answering the research questions (Ragab, & Arisha, 2018). Primary data refers to data obtained from first-hand experience. It is also more reliable, accurate, and consistent compared to secondary since the researcher can test the validity and reliability of the data gathered. The study would use primary data to the impact of Tax Identification Number (TIN) on revenue generation in the Upper East Region of Ghana. The main primary data collection instrument to be used for this research is structured questionnaires.

Questionnaires were used as an instrument for collecting data for the study. A questionnaire is a data collection instrument containing a series of questions that are distributed to research participants for completion and returned to the researcher once completed (Kennedy et al 2011). Close-ended questions would be used. I adopt the use of a technique known as a Likert Scale. In this case (five-point Likert Scale), questions consisting of various statements relating to the subject matter under investigation, of which the respondents would be made to answer whether they agree or disagree with a particular statement for which the responses range from ‘strongly agree’ to ‘strongly disagree’ (Creswell & Creswell, 2017).

Data Collection Procedure

Before data were collected, consent and permission from the relevant respondents were sought. An introductory letter introducing the researcher to the Institutional Review Board (IRB) was obtained from the Department of Accounting of the University of Cape Coast, and ethical clearance was obtained from the IRB. The IRB reviewed the methods for the study to make sure the study met all the needed ethical guidelines before issuing clearance to collect data. The ethical clearance in addition to the introductory letter was used to seek permission from the needed stakeholders with respect to the various institutions. Data were obtained from a primary source. The researcher believes that if a problem is thoroughly identified, the more adequately it is planned and executed successfully. Primary data was obtained from participants in various MMDAs in the Upper East Region. The main advantage of procuring primary data is that the exact information wanted is ascertained. Terms were also carefully defined for respondents who assisted in the exercise administration so that as humanly possible it can be, misunderstanding could be avoided (Ragab & Arisha, 2018).

Data Processing and Analysis

According to Ragab and Arisha, (2018), data analysis refers to the application of reasoning to understand the data that has been gathered to determine consistent patterns and summarize the relevant details revealed in the investigation. Data analysis as indicated by Turesky, (2011) is a process of editing, cleaning, transforming, and modeling data, to highlight useful information, suggestions, conclusions, and supporting decision-making. The research would use Microsoft Excel Packages and Statistical Product for Service Solutions (SPSS) 24 version for the data entry and analysis. The data analysis would be done using descriptive statistics. Data would be presented as frequencies and percentages, mean and standard deviation.

Ethical Consideration

In the event of any research process, it is imperative that the rights of respondents be respected, as stated by Munarez Galvez and Arista Miranda (2017). Certain sensitive questions were removed from the socio-demographic information section of the data collection instruments to ensure the confidentiality and anonymity of the respondents. These sensitive questions included the respondent's religious background, home address, and telephone numbers. Likewise, respondents were given the assurance that any information obtained would be kept strictly confidential and used only for scholarly purposes. As a result, all of the information that was gathered was treated as highly confidential and was not disclosed to any other party or authority. Throughout the course of this research, the following ethical considerations were kept in mind at all times:

First, the purpose of the study was communicated to the participants of the research, and then informed consent was obtained from each participant. Second, we made sure that all of the respondents participated voluntarily. Because "all research participation must be voluntary," as stated in the Jenlink, and Jenlink, (2016) no respondent was forced or compelled to take part in the study. The third point is that the participants' rights to withdraw from the research process were respected at all times. That is, respondents who did not wish to continue providing the researcher with information had the option to opt out of participating in the study without being subjected to any kind of coercion on the part of the researcher. Fourth, in order to ensure that the respondent's privacy was protected to the fullest extent, we made sure that the instruments we used did not include any prompts for respondents to provide their names anywhere. This was done so that the identities of the respondents would not be revealed.

Chapter Summary

This chapter presented the research philosophy, approach, design, population of the study, sample size and sampling procedure, data collection instrument, data processing and analysis, and ethical considerations. The study used the quantitative research approach as well as the explanatory study design. The questionnaire was used for data collection. Both descriptive statistics and inferential statistics were employed for data analysis, and SPSS 22 was used for data processing.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

The main purpose of this study was to assess the effect of Tax Identification Number (TIN) on revenue generations in Ghana. This chapter focuses on the presentation of results and discussion of same. There are four main sections in this chapter. The first section presents the demographic information of respondents; the second, third, and fourth present results and discussions on objectives one, two, and three, respectively.

Table 1: Demographic Information of Participants

Variable	Variable Categories	Frequency	Percentage (%)
Gender	Male	52	48.1%
	Female	56	51.9%
Age	Up to 29yrs	19	17.6%
	30 – 39yrs	60	55.6%
	40 – 49yrs	20	18.5%
	50-59 years	9	8.3%
Level of education	SSS/SHS	4	3.7%
	Diploma	10	9.3%
	HND	26	24.1%
	Bachelor	45	41.7%
	Masters	23	21.3%
Length of Service	Less than 2 years	7	6.5%
	2-4 years	36	33.3%
	5-7 years	40	37.0%
	More than 7	25	23.1%

Source: Field survey (2023) Obs:108

Table 1 shows the socio-demographic information of the respondents involved in the study. From Table 3, it could be seen that male respondents were 52 representing 48.1% of the total sample size. The remaining 56 of the respondents representing 51.9%were females. The findings show that there were somewhat more female than male participants in this study, which may be due to the sampling method used to select respondents or may simply reflect the higher percentage of females in the sampled study area, however, this difference was not huge enough to have any influence on the outcomes of this study. In terms of the age range of the respondents, the majority of the respondents were between the ages of 30-39 years old, making up 60 (55.6%) of the total respondents. This was followed by respondents who were 40 to 49years old, making up 20 (18.5 percent), up to 29 years old, making up 19 (17.6 percent), and finally, respondents who were 50-59 years old, making up 9 (8.3 percent) respectively.

Further as shown in Table 1, the researcher went further to find out from participants their highest level of education. Senior secondary school/Senior high school certification were considered the minimum. According to the Table, 1 of the respondents, representing 3.7 percent of the total 108 respondents, held a Senior secondary school/Senior high school certification (SSS/SHS); 10 of the respondents, representing (9.3 percent), held Diploma certificates; 26(24.1%) held HND degrees; 45(41.7%) of the respondents held Bachelor's degree and finally 23 representing 21.3% held Master's degree. All of the responders were educated and had a good understanding of the subject, it can be said. It was decided that their diverse viewpoints and thoughts on this delicate subject would be more helpful to the direction of this research.

The difference in revenue generation before and after the introduction of Tax Identification Number (TIN) in the Upper East Region.

The first objective sought to access the difference in revenue generation before and after the introduction of the Tax Identification Number (TIN) in the Upper East Region. To achieve this particular objective, the researcher conducted a Paired Sample t-test to analyze revenue generation before and after the introduction of TIN in the Upper East Region and the result was put in the form of mean and standard deviation to enable comparison and conclusion drawn.

Table 2: Paired Sample t-test of revenue generation before and after the introduction of Tax Identification Number (TIN).

Tax Revenue	Mean	Std. Deviation	*t-value*	df	P-Value
	-58257.20000	22815.49672	-8.845	11	0.000

Source: Annual Revenue (2011-2022)

From Table 2, the study compares revenue generated before the introduction of TIN and the After introduction of TIN. Clearly, the paired sample t-test results in Table 2 indicate that there was a significant difference between the revenue generated Before and After the introduction of the TIN. The results showed a mean value of (M= -58257.20000) with a standard deviation of (SD=22815.49672). Further, the results indicated that there is a statistically significant impact of TIN on revenue generation (t = -8.845, P = 0.000). This suggests that the introduction of TIN in 2017 by the government of Ghana has a positive effect on revenue mobilization derived from the government. Further the introduction of the tax identification number has led to an increase in revenue generation as per the results above. Government is therefore encouraged to improve upon the policy in order to get more taxpayers to register for their TIN which will in turn increase or improve revenue generation.

The findings of the current study were similar to the findings by Kipilimba, (2018) which indicates that effective tax administration in Tanzania is primarily enhanced by good tax design, effective tax policy, and laws, tax administrative structure, tax collection methods, proper use of a computerized system for maintaining taxpayer registers, outsourcing revenue collection to private tax collectors, internal and external capacity building, intensive coordination with other entities, and proper maintenance of taxpayer's records.

Further, the findings of the current study are in line with the findings by Oladejo and Ogunseye (2021) The (ARDL) Model revealed that the internally generated revenue (IGR) before the introduction of TIN between (1997-2007) was not significant. Also, it was revealed that the introduction of TIN (2008-2018) has witnessed a tremendous increase in internally generated revenue in Akwa Ibom State, rejecting the null hypothesis that TIN does not militate against tax evasion in Nigeria (a case study of AkwaIbom State board of internal revenue).

All in all, the foregoing discussion points to the fact that there has been an increase in revenue generation after the introduction of the Tax Identification Number (TIN). This is an indication that this tax policy has come to minimize tax evasion by taxpayers hence the increase in revenue generation. Therefore, the GRA should step up education regarding TIN in other to get more taxpayers to register for their which would lead to an increase in revenue generation.

Benefits of Taxpayer Identification Number (TIN) in revenue generation.

The second objective sought to examine the benefits of taxpayer identification number (TIN) in revenue generation. To achieve this particular objective, the researcher conducted a descriptive analysis and the result was put in a form of mean and standard deviation to enable comparison and conclusion drawn

Table 3: Benefits of TIN in Revenue Generation

Benefits of TIN in Revenue Generation	Mean	Std. Deviation
Expansion of tax system which is useful for national security and social planning purposes.	3.3333	1.17609
Increase voluntary compliance and discourage tax evasion.	3.8611	1.00892
Minimising the cost and time needed for tax compliance from the taxpayer by tax authorities	3.7222	1.03971
Modernizes the efficient way of assessing and detecting taxpayer defaults and tax leakages	4.2315	0.54010
Having a single and effective taxpayer's database for the Ghana Revenue Authority at all levels;	3.5556	0.70158
A friendly tax system that is well coordinated and accessible to all stakeholders.	4.1019	0.80813
TIN program helps provide an efficient, effective, and tax-friendly system in the tax administration and collection	3.7670	0.90969
Introduction of TIN program widens tax base.	3.6019	0.84211
There has been a reduction in the cost of tax compliance for tax authorities as it becomes easier for tax authorities to collate access and retrieve data.	4.1389	0.57125
TIN system drastically reduces leakages in tax collection, eliminates corruption in tax system and enables tax authorities ascertain the actual tax paid.	4.3056	0.46279

Source: Field Survey (2023) N= 108

From Table 3, the results are shown on means and standard deviation presenting the level of agreement or disagreement of the respondents on the benefits of TIN in revenue generation. The statement ‘’ Expansion of tax system which is useful for national security and social planning purposes.’’ recorded a mean value of (M=3.3333) with a standard deviation of (SD= 1.17609) showing that respondents agreed with the claim that Expansion of tax system is useful for national security and social planning purposes. Again, the researcher also sought to find out whether respondents agreed or disagreed with the statement that TIN Increase voluntary compliance and discourage tax evasion. The mean value according to this statement was (M=3.8611) with a standard deviation of (SD=1.00892), indicating that respondents agreed that TIN Increase voluntary compliance and discourage tax evasion.

The statement “Minimising the cost and time needed for tax compliance from the taxpayer by tax authorities” recorded a mean value of (M=3.7222) with a standard deviation of (SD= 1.03971). This implies that on average, the respondents agreed that with the introduction of TIN minimizes the cost and time needed for tax compliance from the taxpayer by tax authorities. The study also sought to bring to light respondents' judgment on the statement “Modernizes the efficient way of assessing and detecting taxpayer defaults and tax leakages”. The mean score for the above statement was (M= 4.2315) with a standard deviation of (SD=0.54010) and this implies that the respondents strongly agreed with the statement that TIN modernizes the efficient way of assessing and detecting taxpayer defaults and tax leakages.

The statement “Having a single and effective taxpayer’s database for the Ghana Revenue Authority at all levels” had a mean value of (M= 3.5556) with a standard deviation of (SD= 0.70158). This implies that, on the whole, respondents concurred that having a single and effective taxpayer's database for the Ghana Revenue Authority at all levels is very important. The study also sought to know respondents' views on the statement "A friendly tax system that is well coordinated and accessible to all stakeholders". The mean score for this statement was (M= 4.1019) with a standard deviation of (SD= 0.80813) suggesting that the respondents had to a great extent agreed that TIN is a friendly tax system that is well coordinated and accessible to all stakeholders.

Again, the statement, "TIN program helps provide an efficient, effective, and tax-friendly system in the tax administration and collection" had a mean score of (M= 3.7670) with a standard deviation of (SD=0.90969). This shows that, on the whole, the respondents concurred that TIN program helps provide an efficient, effective, and tax-friendly system in the tax administration and collection. Furthermore, the statement ‘’ Introduction of TIN program widens tax base’’ recorded a mean value of (M=3.6019) with a standard deviation of (SD= 0.84211). This shows that on the average the respondents agree that the introduction of TIN program widens tax base. The statement ‘’ There has been a reduction in the cost of tax compliance for tax authorities as it becomes easier for tax authorities to collate access and retrieve data e’’ had a mean of (M= 4.1389) and standard deviation of (SD=0.57125) indicating that the participants completely agreed with the statement. Finally, the statement ‘’ TIN system drastically reduces leakages in tax collection, eliminates corruption in tax system and enables tax authorities ascertain the actual tax paid’’ had a mean of (M= 4.3056) and standard deviation of

(SD=0.46279) indicating that the participants completely agreed with the statement.

The findings of the current study correlate with findings by Iheduru and Ajaero (2018) which demonstrate that after TIN implementation in Nigeria, there are significant positive differences in overall non-oil tax revenue, firm income tax revenue, and tertiary education tax revenue, whereas value-added tax revenue declined but not significantly. The study's theoretical foundation is the tax compliance theory, which demonstrates that encouraging voluntary tax compliance is the main goal of any tax reform. Tax authorities use tax revisions as real tools to increase the government's ability to collect taxes. The purpose of the TIN was to encourage more eligible Nigerian taxpayers to register and pay their taxes on time. Therefore, tax compliance theory serves as the foundation for evaluating TIN's influence on Nigeria's tax revenue generation.

The findings were also consistent with that of Tyokoso, (2021) which indicates that the implementation of TIN has a substantial positive link with the generation of internal income in Ekiti State based on the results of the regression analysis. The impact of TIN on the generation of internal income in the states of Ekiti, Osun, and Ondo from 2008 to 2017 is examined by Akinleye et al. (2019). After the introduction of TIN, significant differences were found in the internal revenue generation between the three states, according to the results of secondary data analysis utilizing paired sample t-tests.

In conclusion, taking into consideration the data presented and evaluated, it was clear that, the majority of the sampled respondents generally agreed with the study's assertions regarding the benefits of taxpayer identification number (TIN) in revenue generation. From the above table, all the items produced greater mean scores and less variability and were highly significant.

Challenges facing the implementation of TIN

The third and final objective sought to identify challenges facing the implementation of TIN. To achieve this particular objective, the researcher conducted a descriptive analysis and the result was put in a form of mean and standard deviation to enable comparison and conclusion drawn.

Table 4: Challenges Facing the Implementation of TIN

Challenges Facing the Implementation of TIN	Mean	Std. Deviation
There has been a strong resistance to change by taxpayers especially among those who engage in tax avoidance and evasion.	3.7685	0.71834
The lack of technological exposure prevalent in Upper East Region poses as a threat to the acceptance of the TIN registration.	3.5741	0.84504
Most tax payers in the Upper East Region remain blissfully unaware of the TIN system.	3.5741	0.81118
Lack of the needed resources to capture all taxpayers in the Upper East Region.	4.1296	0.71162
Lack of GRA offices in all the districts to assist taxpayers in their TIN registration in the region.	4.1389	0.72934
Taxpayers are not willing to register for TIN because of the notion that it leads to higher tax rates.	3.8056	0.71641
The online registration process for TIN is not user friendly.	4.3241	0.57728

Source: Field Survey (2023) N=108

From Table 4, the results are shown on means and standard deviation presenting challenges facing the implementation of TIN. The statistics in Table 4 above reveal that all of the constructs had greater means and less standard deviations. The first statement ‘’ There has been a strong resistance to change by taxpayers especially among those who engage in tax avoidance and evasion’’ had a mean value of (M=3.7685) and a standard deviation of (SD=0.71834). This suggests that on average, the respondents agreed that there has been a strong resistance to change by taxpayers especially among those who engage in tax avoidance and evasion. The second statement focuses on ‘’ The lack of technological exposure prevalent in Upper East Region poses as a threat to the acceptance of the TIN registration’’ This statement produced a mean value of (M=3.5741) and a standard deviation of (SD=0.84504). This means that, on the whole, the respondents agreed that lack of technological exposure prevalent in Upper East Region poses as a threat to the acceptance of the TIN registration. The statement “Most tax payers in the Upper East Region remain blissfully unaware of the TIN system” had a mean score of (M= 3.5741) with a standard deviation of (SD= 0.81118), and this implied that the participants agreed Most tax payers in the Upper East Region remain blissfully unaware of the TIN system.

The study further interrogated the participants on the statement, ‘’ Lack of the needed resources to capture all taxpayers in the Upper East Region.’’ This statement produced a mean value of (M=4.1296) and a standard deviation of (SD=0.71162). This also suggests that on average, the respondents agreed that there are lack of the needed resources to capture all taxpayers in the Upper East Region. In addition, the study also wanted to find out whether the respondents agreed or disagreed with the statement ‘Lack of GRA offices in all the districts to assist taxpayers in their TIN registration in the region’. The mean value obtained for this statement was (M= 4.1389) and the standard deviation of (SD=0.72934), suggesting that respondents agreed that there is lack of GRA offices in all the districts to assist taxpayers in their TIN registration in the region. The statement “Taxpayers are not willing to register for TIN because of the notion that it will leads to higher tax rates” had a mean score of (M= 3.8056) with a standard deviation of (SD= 0.71641), and this implied that the participants agreed with the statement. Finally, the statement ‘’ The online registration process for TIN is not user friendly’’ had a mean score of (M= 4.3241) with a standard deviation of (SD= 0.57728).

The analysis demonstrates that practically every item is regarded by the participants as a signal to gauge the challenges facing the implementation of TIN. The study established that the majority of the sampled respondents agreed that there has been a strong resistance to change by taxpayers especially among those who engage in tax avoidance and evasion. According to the findings, most of the participants have revealed that there is lack of technological exposure prevalent in Upper East Region poses as a threat to the acceptance of the TIN registration, and that most tax payers in the Upper East Region remain blissfully unaware of the TIN system. The study also revealed that, a good number of the respondents agreed there are lack of needed resources to capture all taxpayers in the Upper East Region Finally, it was also revealed that the majority of the respondents agreed that Taxpayers are not willing to register for TIN because of the notion that it leads to higher tax rates.

The findings of the current were inconsistent with the findings by Ibadin and Eiya (2013). According to their findings, respondents believe that occasionally evading taxes is morally acceptable, and there is a substantial correlation between tax evasion and avoidance, as well as the ethical perspective, the way taxes are administered, and cultural patterns among the self-employed. Jacob (2014) He discovered that tax avoidance and evasion had harmed Nigeria's economic growth and development. Through the distribution of 160 questionnaires to a chosen group of self-employed people in Edo State, Modugu and Omoye (2014) assessed the evasion of personal income tax in Nigeria and collected primary data. They discovered that the interaction between taxpayers and the taxing authorities and lax penalties have a big impact on tax evasion in Nigeria.

Chapter Summary

This chapter presented the results and discussion. The study first presented the results and discussion relative to the demographic features of the participants. The study further discussed the results and the findings of the study objectives.

The findings revealed that most of the participants have revealed that there is lack of technological exposure prevalent in Upper East Region poses as a threat to the acceptance of the TIN registration, and that most tax payers in the Upper East Region remain blissfully unaware of the TIN system.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter aims at presenting the summary, key findings, conclusions, and recommendations of this study. The summary presents a brief overview of the study problem, objectives, research methods and analytical techniques employed, as well as the study findings. Key findings section focuses on the summary of the main findings of the study. On the other hand, the conclusions summarize the overall outcomes and implications regarding the findings of the study with cognizance of the research objectives. The recommendations also present specific remedies or suggestions to be applied by specific concerned individuals and institutions. The chapter closes with suggestions for further research in the area of the current topic.

Summary of the Study

The amount of money the government spends, mostly on the provision of the political, social, and economic infrastructure of a nation, is determined by how much money it makes. A well-designed tax system is one method for generating enough income. Every country's economy depends on taxes, which are also the main source of income for developed nations (Boadway & Eyraud, 2018). However, tax revenue has generally been moderately low in most developing economies because these nations are known for having adequate public and modern facilities (Ogbonna & Appah 2016). It is based on this background and all the issues advanced that the focus of the current study assessed the impact of Tax Identification Number (TIN) on revenue generation in the Upper East Region, Ghana.

The specific objectives the study sought to achieve were: one, analyze the difference in revenue generation before and after the introduction of Tax Identification Number in the Upper East Region. Two, examine the benefits of TIN in revenue generation, and three, identify the challenges facing the implementation of TIN. To achieve the foregoing objectives, the explanatory research design, in the light of the quantitative research approach, was employed. The study used both secondary and primary data for the analyses. With respect to the sampling method, proportionate random sampling techniques were employed to select the 108 participants from the accessible population. The main tool used for primary data collection for this study was the structured questionnaire containing closed-ended questions. The data extracted were analysed using descriptive statistical tools. Specifically, descriptive statistics such as frequency, percentage, mean, and standard deviation; and paired sampled t-test analysis, were used to analyse the study objectives.

Summary of Key Findings

Based on the analysis of the data, the results revealed an insightful and interesting finding relative to the study objectives. For instance, the first objective of the study sought to analyze the difference in revenue generation before and after the introduction of Tax Identification Number in the Upper East Region. the paired sample t-test results revealed that there was a significant difference between the revenue generated Before and After the introduction of the Tax Identification Number (TIN). The second objective also sought to examine the benefits of Tax Identification Number (TIN) in revenue generation. The results established that there were statistically significant means scores and this clearly showed that the majority of the respondents strongly agreed with the statement relative to the benefits of TIN in revenue generation. The third and final objective sought to identify challenges facing the implementation of TIN. The findings established that the majority of the participants surveyed completely agreed that are challenges confronting the implementation of the Tax Identification Number with the highest being “The online registration process for TIN is not user-friendly”.

Conclusion

Considering the findings of the study, the following conclusions could be drawn based on the study objectives. the first objective of the study sought to analyze the difference in revenue generation before and after the introduction of Tax Identification Number in the Upper East Region. The paired sample t-test results revealed that there was a significant difference between the revenue generated Before and After the introduction of the Tax Identification Number (TIN). This implies that this tax policy has come to minimize tax evasion by taxpayers hence the increase in revenue generation. Therefore, the GRA is encouraged to step up education regarding TIN in other to get more taxpayers to register for their TIN which would lead to an increase in revenue generation.

The second objective also sought to examine the benefits of Tax Identification Number (TIN) in revenue generation. The findings established a statistically significant means scores and this clearly showed that the majority of the respondents strongly agreed with the statement relative to the benefits of TIN in revenue generation. The study can therefore conclude that there are a lot of benefits for the government of Ghana with the introduction of the TIN policy in 2017. Government must educate potential taxpayers to get registered for the TIN.

The third and final objective sought to identify challenges facing the implementation of Tax Identification Number (TIN). The findings revealed that respondents completely agreed to the statements regarding the challenges facing the implementation of Tax Identification Number, with the highest mean score being ‘’ The online registration process for TIN is not user friendly.’’ Therefore, based on the findings, the researcher can conclude that there are challenges facing the implementation of the Tax Identification Number, hence urgent steps need to be taken by the government through GRA to address these challenges in order to achieve the policy’s main intention of widening the tax net.

Recommendations

Having considered the key findings and the conclusions drawn, it was imperative to make recommendations that might positively influence the impact of Tax Identification Number (TIN) on revenue generation in the Upper East Region, Ghana. The researcher, therefore, made the following recommendations based on the current findings and conclusions drawn.

1. The study recommends that the government of Ghana through GRA should embark on a vigorous campaign or education on the need for taxpayers or potential taxpayers to register for their TIN because of its positive impact on revenue generation.
2. Tax identification policy of the government has the potential of reducing tax evasion and hence must be straightened.

3. The study finally recommends that the government should take steps to address the challenges faced by the Tax Identification Number (TIN) policy in order to improve revenue generation.

Suggestions for Further Studies

Considering the gaps identified in the literature and the limitation of the current study, the researcher, therefore, suggest that future studies can be conducted by expanding the current study to cover all the regions in Ghana. The researcher also suggest that further studies should be carried out on SMEs in Ghana to determine how TIN have improve their tax compliance level. Finally, the researcher suggest that further studies should include variables like ‘the processes of improving Tax Identification Number in Ghana’’.

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APPENDICES

QUESTIONNAIRE

UNIVERSITY OF CAPE COAST

COLLEGE OF HUMANITIES AND LEGAL STUDIES

SCHOOL OF BUSINESS (DEPARTMENT OF BUSINESS PROGRAMMES)

QUESTIONNAIRE

I am a student of the University of Cape Coast (UCC), admitted into the School of Business and in the Department of Accounting. As part of the programme, I am undertaking research on the topic "the impact of Tax Identification Number (TIN) on revenue generations in Ghana A Study in the Upper East Region." I would be grateful if you could help me in answering these questions. You are kindly requested to read through the items and your responses will be treated as confidential and will be used for academic purposes. Your confidentiality will be maintained since your name is not required. Thanks for taking the time to help with this research.

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

Please tick (√) the option given below that best describes your answer.

1. Gender: Male [ ], Female [ ]

2. Age of respondents: Up to 29 [ ], 30-39 [ ], 40-49 [ ], 50-59 [ ],

3. Length of service (in years): **(a)** Less than 2 [ ] **(b)** 2-4 [ ] **(c)** 5-7 [ ] **(d)** More than 7 [ ]

4. Educational level of respondents: 1. SHS 2. Diploma 3. HND **4.** Bachelors **5**. Masters

BENEFITS OF TAXPAYERS' IDENTIFICATION NUMBER

Please indicate the extent to which you agree with the following statements by using a scale of **1 to 5 where 1=strongly agree, 2=agree, 3= neutral, 4= disagree, 5= strongly disagree**

	Benefits of Taxpayers' Identification Number	1	2	3	4	5
B1	Expansion of tax system which is useful for national security and social planning purposes.					
B2	Increase voluntary compliance and discourage tax evasion.					
B3	Minimising the cost and time needed for tax compliance from the taxpayer by tax authorities					
B4	Modernizes the efficient way of assessing and detecting taxpayer defaults and tax leakages					
B5	Having a single and effective taxpayer's database for the Ghana Revenue Authority at all levels;					
B6	A friendly tax system that is well coordinated and accessible to all stakeholders.					
B7	TIN program helps provide an efficient, effective, and tax-friendly system in the tax administration and collection					

B8	Introduction of TIN program widens tax base.					
B9	There has been a reduction in the cost of tax compliance for tax authorities as it becomes easier for tax authorities to collate access and retrieve data.					
B10	TIN system drastically reduces leakages in tax collection, eliminates corruption in tax system and enables tax authorities ascertain the actual tax paid.					

CHALLENGES OF TIN REGISTRATION

Please indicate the extent to which you agree with the following statements by using a scale of **1 to 5 where 1=strongly agree, 2=agree, 3= neutral, 4= disagree, 5= strongly disagree**

	Challenges of TIN Registration	1	2	3	4	5
C1	There has been a strong resistance to change by taxpayers especially among those who engage in tax avoidance and evasion.					
C2	The lack of technological exposure prevalent in Upper East Region poses as a threat to the acceptance of the TIN registration.					
C3	Most tax payers in the Upper East Region remain blissfully unaware of the TIN system.					
C4	Lack of the needed resources to capture all					

	taxpayers in the Upper East Region.					
C5	Lack of GRA offices in all the districts to assist taxpayers in their TIN registration in the region.					
C6	Taxpayers are not willing to register for TIN because of the notion that it leads to higher tax rates.					
C7	The online registration process for TIN is not user friendly.					