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Curbing Tax Evasion through Taxpayer Identification Number (TIN) in Niger State, Nigeria

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Abstract: This study assessed the effectiveness of the introduction of Taxpayer Identification Number (TIN) in curbing tax evasion in Niger State, Nigeria from the point of view of ten tax officers of the Niger State Internal Revenue Service. Adopting a qualitative research design, ten tax officers were interviewed to understand their collective perceptions of the level of tax evasion in Niger State before and after the introduction of TIN. Thematic analyses of the interviews revealed that all ten tax officials agreed that tax evasion was at a very high level before the introduction of TIN, but reduced dramatically after the introduction of TIN proving its efficacy. The study recommended that tax evasion in the State could be further reduced if businesses operating in the informal sector could be registered and included in the database of taxable entities

Keywords: Tax evasion; Tax identification number; Government policy; Tax officers; Nigeria

Introduction

The most important role of all governments is to provide an enabling environment for their citizens to live meaningful and happy lives and to have equal opportunities to achieve their greatest potential (Khambule, 2018; Sabet & Khaksar, 2020). To achieve this important mandate, governments have to provide public goods and services such as affordable healthcare, excellent public transport systems, potable water, good roads, clean energy and competent educational systems among many others (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).

Unfortunately, the ability of governments to fully harness tax revenues for the continued provision of high quality public goods and services has been hampered by the concept of

tax evasion (Eja et al., 2018; Das, 2019). Tax evasion is a criminal action whereby individuals or organizations deliberately choose not to pay the full amount of taxes they owe by misrepresenting how much income they have made (Bott et al., 2020; Casi et al., 2020). As tax evasion is often a concealed act, it is very difficult to determine exactly how much tax revenue is lost globally due to tax evasion, but estimates put it at between \$500-650 billion dollars annually (Tax Justice Network, 2020).

Developing policies and strategies to combat tax evasion has thus been an important priority for governments around the world (Boolaky et al., 2018; Andoh et al., 2019). Typically these strategies involve attempts to improve the ability of tax authorities to discover tax evasion attempts (Peprah et al., 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 et al., 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 their 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).

In 2008, the Nigerian government introduced TIN as a strategy to combat tax evasion that is rampant in the country (Olokooba, 2019). Since its introduction more than a decade ago, as far as the researchers are aware, no impact assessment has been undertaken to determine whether it has achieved its objective. This study sought to address this important policy gap by determining the efficacy of this strategy from the point of view of tax officials working with the Niger State Inland Revenue Service. Niger State is a state in North Central Nigeria. The TIN strategy was adopted over other strategies because it was determined to have the greatest chance of success. This was because it made access to basic services by businesses completely dependent on the possession of TIN which allowed the government to know whether or not a business

This study adopts a qualitative approach by interviewing tax officials to understand their perspective regarding the efficacy of TIN in combating tax evasion in the state; this approach makes this study different from typical tax evasion studies that rely on secondary data to determine the efficacy of tax evasion policies like TIN (e.g., Ahrens & Bothner, 2019; Bethencourt & Kunze, 2019; Casais et al., 2019; Agarwal et al., 2020; Bernasconi et al., 2020.

Literature Review

Theoretical framework

In attempting to understand the efficacy of TIN in curbing tax evasion in Niger State, this theory adopted the economic theory of criminal behaviour. This theory was postulated in 1968 by Nobel Laureate Gary Becker, an American professor of economics in his seminal work titled 'Crime and Punishment: An Economic Approach' (see Becker, 1968). The theory envisions criminals as rational human beings who weigh the expected benefit of committing a crime with the probability of being caught committing the crime as well as the severity of the punishment attached to that crime; if a criminal perceives that the benefit outweighs the costs, then he is more likely to commit that crime and vice-versa (Brabanec & Montag, 2018). From a tax evasion point of view, this theory postulates that government can curb tax evasion by making the probability of discovery very high and the punishment for evasion quite significant (Kirchler, 2019).

Figure 1 provides this study's theoretical framework which suggests that prior to the institution of the mandatory TIN for all taxable entities, the negative consequences of engaging in tax evasion was negligible which thus led to a high rate of tax evasion. The framework further posits that once TIN was mandated and made a prerequisite for many essential services, the negative consequences of engaging in tax evasion became very high and should thus lead to a significant reduction in incidents of tax evasions.

Perceived Prior to the Levels of tax introduction of TIN negative evasion consequence s of tax Perceived After the Levels of tax negative introduction of TIN evasion consequence s of tax

Figure 1: Theoretical framework

Source: Authors' (2020)

Empirical review

This section provides a review of prior empirical studies investigating the impact of various government policies on tax evasion. These studies were divided into two groups based on the form of tax evasion they were addressing: 1) Onshore tax evasion and 2) Offshore tax evasion. These two broad groups of studies are discussed in the subsequent subsections.

Tackling onshore tax evasion

Sanchez (2011) compared the impact of two types of government policy in dealing with onshore tax evasion. Specifically, the study compared tax evasion levels in Argentina and Chile. Argentina adopted an enforcement strategy of tax evasion whereby an elite audit team was established to ensure that companies were paying the correct taxes owed to the government. On the other hand, Chile adopted a "service-oriented" tax policy whereby the quality of personnel in the tax agency was enhanced and transparency as to how the tax agency utilized the tax revenue collected was enhanced. A comparison of tax evasion levels from 1990-2001 revealed that the Chilean strategy was more effective in reducing tax evasion than the Argentinean strategy, with the former strategy leading to a permanent decline in tax evasion rates while the latter strategy only led to a short-term decline, with the rates rising back to original levels after a period of time.

Unlike Sanchez (2011) who focused on onshore tax evasion in South America, Bouet and Roy (2012) focused on the same issue in Africa. Specifically, they sought to determine the impact of trade protection rates on tariff evasion in Nigeria, Kenya and Mauritius. Utilizing trade protection data for 2001 and 2004, the study was able to establish that for Kenya and Nigeria, trade protection tariffs were positively and significantly related to the rates of tariff evasion, but this was not the case in Mauritius.

The review on government policy and its relationship with tax evasion moves on from Africa (Bouet and Roy, 2012) to Europe, with Chiarini et al. (2013) investigating whether a relationship existed between tax rates and VAT tax evasion in Italy. Utilizing VAT tax evasion data for the years 1980-2004, Chiarini et al. (2013) found that increases in tax rate led to increases in VAT tax evasion.

Whilst Chiarini et al. (2013) focused on VAT tax evasion in Italy, Church et al. (2013) investigated fuel tax evasion in the United States of America. Fuel taxes are charged on the users of fuel in order to help fund road construction in American cities (Church et al., 2013). Americans who use diesel for off-road duties like farming are permitted to purchase tax exempt fuel which is dyed. However, in the event they do not have access to this tax-exempt fuel, they are allowed to reclaim fuel taxes paid using a tax refund process (Church et al., 2013). Church et al. (2013) sought to determine to what extent people in Montana abused the fuel tax refund process in order to evade legitimate fuel taxes they owe to the government. An analysis of Montana fuel tax refund data for three years revealed that most errors identified in the request for tax refunds actually favoured the state rather than individual claimants which led the authors to conclude that people living in Montana did not actively practice fuel tax evasion via the tax refund process.

Like Chiarini et al. (2013) two years earlier, Casaburi and Troiano (2015) explored the issue of tax evasion in Italy. The latter study sought to assess the efficacy of a national anti tax evasion policy that utilized cutting-edge technology to identify buildings hidden from tax enforcement agencies. The data utilized for analysis include aerial photographs that helped tax enforcement agencies identify buildings that were eligible for property taxes but which the owners failed to officially register all in a bid to avoid paying taxes. The data also included the number of owners of such unregistered buildings who heeded the government's call to register those buildings before a set deadline. The study found that the intensity of the monitoring programmes in the towns studied was positively related to the

number of people who decided to register previously unregistered buildings and thus start paying property taxes.

Still remaining in Europe, Semerad and Bartunkova (2016) investigated the impact of the introduction of a VAT control statement in the Czech Republic as a means of reducing tax evasion mainly among SMEs. The VAT control statement is the output of a specialized software that helps tax authorities to verify in real time the VAT claims made by SMEs (Semerad & Bartunkova, 2016). VAT control statement data obtained from the Czech tax authority and analyzed revealed that the software improved the effectiveness of the government in assessing actual VAT claims and liabilities for SMEs in the country. Integrating technology as part of strategies to curb tax evasion has proven to be effective in Italy (Casaburi & Troiano, 2015) and the Czech Republic (Semerad & Bartunkova, 2016).

Across the Arctic Ocean in Asia, Lee and Swenson (2017) evaluated the efficacy of a Korean tax policy in reducing tax evasion among local businesses who primarily dealt in cash transactions which were thus difficult to effectively track. In 2005, The Korean National Tax Service (NTS) introduced the Cash Receipts System (CRS) which offered citizens incentives to request receipts for cash transactions which entitled them to income tax deductions (Lee & Swenson, 2017). An analysis of tax data from the NTS over the years 2006-2012 revealed that the CRS intervention significantly reduced tax evasion and was cost effective.

Buckenmaier et al. (2018) becomes the third study in this review exploring tax evasion in Italy (the other two being Chiarini et al., 2013; Casaburi & Troiano, 2015). This particular study conducted an experiment to determine whether or not the introduction of incentives for whistle blowing against tax evaders would reduce incidences of tax evasion. 268 undergraduate students from the University of Trento participated in the experiment, and the results revealed that people were less inclined to evade taxes when they knew that they could be reported by incentivized whistle blowers.

Carfora et al. (2018) also investigated tax evasion in Italy, with their focus being on determining the impact of increased audits and enforcement on tax evasion over an eleven year period, 2001-2011. Econometric analysis of regional tax data revealed that increased auditing and enforcement reduced incidents of tax evasion.

Conventional wisdom suggests that tax rates would be negatively correlation with tax evasion: the higher the tax burden on citizens, the more likely they would be willing to evade taxes (Filer et al., 2018). However, an analysis of household data surveys from eight post-communist countries that reduced the tax rates on citizens' income revealed that there was no significant change in the estimated amount of unreported income following the reform. Filer et al. (2018) explained that these results could have been due to the fact that citizens felt that a reduction in their tax burden also would lead to a decrease in the quality of services received from the government. This meant that people in those countries felt they still needed to underreport their income in order to be able to supplement the expected decline in public goods and services.

An important element for effective identification and prevention of tax evasion is having quality, real-time records of business transactions; this is particularly important for curbing VAT tax evasion (Immordino & Russo, 2018). An analysis of VAT tax data from Europe

by Immordino and Russo (2018) revealed that incentivizing cashless payments helps to reduce VAT tax evasion because it provides tax collection agencies in Europe with a paper trail for all transactions concluded by the use of credit cards and other electronic payment methods.

In Malaysia, the government has adopted a self assessment strategy whereby citizens are required to fill income tax returns on their own and determine their tax liabilities. The government hopes that this will enable citizens to learn more about the tax laws and to encourage them to be honest with the government regarding their actual incomes (Nawawi & Alin, 2018). The drawback to this system is that it is liable to be abused by citizens who do not want to pay taxes on all of their income and thus are more likely to underreport their earnings (Nawawi & Alin, 2018). To aid tax agents with being able to detect incidents of tax evasion, a capital statement analysis strategy has been introduced whereby agents compare reported spending and savings with total income with any discrepancy being a likely case of tax evasion (Nawawi & Alin). An in-depth analysis of five randomly selected tax investigation cases revealed that capital statement analysis was an effective strategy in identifying instances of tax evasion.

Weerasekera (2018) assessed the impact of tax rates on tax evasion in Sri Lanka by focusing on two types of border tax evasion: 1) underreporting of the value of imported products and 2) deliberately putting wrong labels on imported products so as to pay less taxes. Using the OLS methodology, Weerasekera (2018) measured the difference between the values of truthfully reported exports and falsely reported imports, and found that the impact of a border tax rate change had an insignificant impact on the level of estimated tax evasion being practiced.

In Portugal, Casais et al. (2019) conducted a case study to determine the impact of a social marketing campaign aimed at reducing tax evasion by encouraging traders to issue invoices to customers containing their tax identification numbers. Traders and customers were encouraged to utilize these invoices via tax deductions and an invoice lottery where people were able to win prizes regularly. The findings of the case study revealed that the social marketing campaign really made issuing invoices with customer tax numbers a common practice with the subsequent consequence of reducing tax evasion.

Wilks et al. (2019) sought to understand why Portuguese citizens were cooperating with the government in demanding for invoices from traders containing their tax identification numbers as a strategy to combat VAT tax evasion; this study is closely related to Casais et al.'s (2019) study that examined the same invoice campaign in Portugal. A survey of 931 Portuguese citizens revealed that the incentives of tax deductions and a tax lottery were the main motivation for their voluntary participation in the invoice-request campaign to reduce VAT tax evasion.

Like Buckenmaier et al. (2018) a year earlier, Masclet et al. (2019) conducted an experiment to determine the efficacy of whistle blowing as a strategy for tackling tax evasion. Using 432 subjects from Canada and France, the study conducted an experiment whereby participants had the opportunity to report other participants who attempted to evade taxes in the tax game utilized in the experiment. The results showed that participants were more willing to report their true income when they knew that others could report them if they

attempted to evade taxes by underreporting their incomes. This was a similar finding to that of Buckenmaier et al.'s (2018) whistle blowing experiment in Italy.

Moving to the Persian Gulf in Iran, Yousefi et al. (2019) investigated the impact of tax rates on import tax evasion. Using data from the Iranian Customs from 2004-2013, the study found that an increase in import tax rates led to an increase in tax evasion as proxied by the trade gap; trade gap was defined as "the difference between reports from the two ends of a trade link" (Yousefi et al., 2019, p. 31).

Like Yousefi et al. (2019), Agarwal et al. (2020) also found that an increase in tax rates led to an increase in tax evasion, this time in the Chinese housing estate. Specifically, the study examined the impact of an increase in capital gains tax on tax evasion as measured as the difference between the actual value of a property and the value reported by the property sellers at the tax authority. An analysis of the available tax data revealed that as the capital gains tax increased, property sellers were reducing the actual value of their property by 15%.

Gorecki and Letki's (2020) study concludes this subsection. This study investigated the moderating effect of a country's subjective norms on the relationship between tax rates and tax evasion among fourteen Central and Eastern European countries. An analysis of a survey of citizens from the fourteen countries revealed that citizens were less likely to engage in tax evasion even when tax rates were increased if they perceived that most of their fellow citizens were honest tax payers.

Tackling offshore tax evasion

Ecclestone and Gray (2014) sought to evaluate the impact of the US Foreign Accounts Tax Compliance Act (FACTA) on offshore tax evasion. FACTA was enacted in 2010 and requires all non-US financial firms to provide information about accounts belonging to US citizens (Eccelestone & Gray, 2014). The Act also requires all US citizens to file an annual report on any foreign account holdings that they possess (Eccelestone & Gray, 2014). Eccelestone and Gray (2014) sought to understand the perceptions of key stakeholders in the international tax community regarding the potential of FACTA to help stem the tide of international tax evasions. Interviews with these stakeholders revealed that they had mixed feelings regarding the efficacy of FACTA: on one hand, they agreed that it would improve the US's capacity to tax the foreign holdings of its citizens, but on the other hand, they felt that the fact that FACTA's origin was unilateral would affect reciprocity among the international tax community.

Switzerland has been a popular destination for international tax evaders due to the anonymous, confidential and client-friendly banking policies it possesses (Johanssen, 2014). However, a recent EU tax reform aimed at reducing offshore tax evasion required Swiss banks to charge a withholding tax on interest income for account holders from EU countries. Johanssen (2014) evaluated the effectiveness of this reform by comparing the amount of deposits in Swiss banks from EU citizens with those from non-EU citizens who were not subject to the new withholding tax on interest income. The comparison revealed that deposits by EU citizens in Swiss bank accounts declined by 30-40% relative to their non-EU counterparts. However, Johanssen (2014) also found that EU citizens simply shifted their funds to other offshore banks that were not subject to the EU's withholding tax on interest income. This finding indicated that charging a withholding tax on interest

income would only be effective in reducing offshore tax evasions if all financial institutions agreed to abide by the reform.

Aside FACTA, the OECD Tax Information Exchange Agreement (TIEAS) is another information-sharing policy aimed at reducing offshore tax evasion. TIEAS was established in 2002 to encourage information sharing among countries regarding issues of taxes; however it is a voluntary agreement (Kemme et al., 2017). Kemme et al. (2017) utilized data from Foreign Portfolio Investment to estimate the impact of TIEAS on offshore tax evasion. The analysis of the data revealed that the TIEAS had made little to no impact in reducing offshore tax evasion as evidenced by the fact that there was a positive relationship between tax burdens and the tendency of OECD residents to move their money to tax havens.

Ahrens and Bothner (2019) conducted a difference-in-difference analysis of data regarding transactions between nations to determine the effectiveness of FACTA and the Common Reporting Standard (CRS) in curbing international tax evasion. The CRS was developed by the OECD in 2014 to facilitation automatic exchange of tax information among countries (Ahrens & Bothner, 2019). The study found that both policies were effective in curbing international tax evasion as evidenced by the fact that the value of household assets in tax havens were estimated to be 67% lower than they would have been if these two tax information-sharing polices had not been in place.

Menkhoff and Miethe (2019) sought to assess the long term impact of information sharing policies like FACTA and CRS on international tax evasion. Utilizing 15-year bilateral bank data (2003-2017) for 1397 country pairs, the study's analyses revealed that tax evasion decreased in the first eight years (2003-2010) as evidenced by a decline in bank deposits in tax haven countries. However, as of 2010 these declines stopped happening implying that tax evaders had developed different strategies to disguise their true incomes thus diluting the impact of these information sharing policies.

DeSimone (2020) provide further evidence on the efficacy of FACTA on curbing offshore tax evasion. The study discovered that since the institution of FACTA, there has been a decline of over \$7 billion in equity foreign portfolio investment from countries designated as tax havens to America.

The review of extant literature on the impact of government policies on tax evasion revealed that although several different types of coercive policies have been explored, the particular policy of enacting a tax identification number on citizens and businesses and its impact on occurrences on tax evasion has be relatively under-researched. This current study addresses this gap by investigating the impact of TIN on tax evasion in a Nigerian context. Additionally, most of the prior studies relied on secondary data to assess the relationship between government policy and tax evasion. This study provides a different perspective and insight by investigating the opinions of the tax officers themselves regarding the efficacy of a government policy on tax evasion. These officials are tasked with ensuring tax compliance and thus are in a unique position to assess the effectiveness of government policy in reducing tax evasion.

Methods

Research Design

The ultimate aim of this study was to determine the impact of the introduction of TIN on tax evasion in Niger State from the point of view of officials of the Niger State Internal Revenue Board. In order to successfully fulfill this aim, this study adopted an exploratory and qualitative research design. An exploratory research design was adopted rather than a confirmatory research design due to the fact that as far as the researcher was aware, this was the first study to examine the effectiveness of Tax payer Identification Number (TIN) in curbing tax evasion in Niger State.

Similarly, a qualitative research paradigm was adopted rather than a quantitative approach because the use of semi-structured interviews enabled the researcher to know the mind-set of the selected staffs as to express their views regarding curbing of tax evasion through the use of TIN.

As of the time of this study, the Niger State Board of internal revenue service in Minna, Niger state had 36 staff. This study adopted a purposive sampling technique in order to identify the appropriate staff to be interviewed for this study. For this study, it was important that the officials selected be those that had been in service with the organization prior to the institution of TIN. The reason for this criterion was that the only way that the officials could give their informed opinion regarding the impact of TIN on tax evasion in the state was if they had worked before and after TIN was instituted.

Sebele-Mpofu (2020) stated that when it comes to determining an ideal sample size of the population to study, there is a distinct difference between quantitative and qualitative studies. Sebele-Mpofu (2020) explained that for quantitative studies, the main concern is ensuring that the sample is representative of the entire population. For qualitative studies like this current study however, the main concern is achieving saturation (Sebele-Mpofu, 2020). Although there is no consensus regarding how many interviews must be carried out to achieve saturation, 10-15 interviews are considered appropriate (Sebele-Mpofu, 2020). This study chose to interview ten officials of the Niger State Internal Revenue Service who had been in service prior to the introduction of TIN.

Data collection

When developing interview question, a primary concern is attaining interview validity (Sleed et al., 2020). Interview validity is achieved when each question developed maps a specific factor the researcher is trying to measure (Sleed et al., 2020). In order to fulfil the aim of this study, the 10 officials interviewed were asked the following two questions:

- i. What was the rate of tax evasion before the introduction of TIN?
- ii. What was the rate of tax evasion after the introduction of TIN?

Each interview lasted about ten to fifteen minutes and was recorded with permission from the interviewees.

Data analysis

The interview data obtained for this study was analysed in two steps. The first step involved transcribing each of the interviews. The second step involved analysing the responses of each of the interviewees in order to identify similar themes in their responses

and thus fulfil each of the study's objectives; this second step is referred to as a thematic analysis.

Findings

Demographic characteristics or interviewees

The demographic characteristics of the staff of Niger State Board of internal revenue service in Minna, Niger State that participated in the interview process of this study are represented in the Table 1.

Table 1. Demographic characteristics of interviewees

S/N	DETAILS	INTERVIEWEES	FREQUENCY	PERCENTAGE
1.	Sex:	Male	7	70.00
		Female	3	30.00
2.	Status:	Single	0	-
		Married	10	100.00
		Divorced	0	-
3.	Age:	Below 25yrs	-	-
		25-29yrs	-	-
		30-59yrs	5	50.00
		60 and above	5	50.00
4.	Religion	Islam	6	60.00
		Christianity	4	40.00
5	Educational	PSCL	-	-
	Qualification	O' Level	-	-
		ND/NCE	2	20.00
		HND/B.Sc.	4	40.00
		M.Sc./M.BA	3	30.00
		Ph.D.	1	10.00
6	Experience	Below 5 yrs	-	-
		6-10yrs	7	70.00
		11yrs and above	3	30.00

Source: Authors' field study (2020)

It can be observed from Table 1 that a majority of the interviewees were men, representing 70%; there were only three women interviewed. This is representative of the Niger State Civil Service where more men are employed than women. Table 1 also indicates that all ten officials were married, with half of them between 30 and 59 years of age, and the other half 60 years and above. Six of the ten officials identified as Muslims while the remaining four identified as Christians. Table 1 indicates that four of the ten officials interviewed had a Higher Diploma or a Bachelor's Degree, three had a Masters Degree, two had a National Diploma, while only one official had a Doctorate Degree. Seven of the ten officials had been in service for between six to ten years, while three had been in service for at least eleven years.

Level of tax evasion in Niger State prior to the adoption of TIN

All ten officials of the Niger State Internal Revenue Service interviewed agreed that the rate of tax evasion before the advent of TIN in Niger State was very high as taxable entities were going about their businesses without discharging their civic responsibilities. One

official opined as follows: "Before the introduction of TIN, tax evasion was so prevalent that it hindered the development of the State in terms of provision of social amenities for the citizens". Another official explained that "the high rate of tax evasion affected the payment of civil servant salaries due to shortfalls in the expected amounts of internally-generated revenues". According to another official, the lack of an enforcement mechanism like TIN "facilitated fraudulent activities between the tax payers and tax officials". "Many organizations deliberately presented false figures in their balance sheets in order to lower their tax liabilities". These findings are in line with the precepts of the economic theory of criminal behaviour which predicted that as long as the likelihood of being discovered committing tax evasion was considered low, the level of tax evasion would be high. They also show the importance of tax revenues for a government to be able to provide basic services to its citizens such as paying them a regular wage.

Level of tax evasion in Niger State after the introduction of TIN

All ten officials affirmed that the introduction of TIN lead to a significant reduction in the tax evasion levels experienced in Niger State. This conclusion was gleaned from the following responses of some of the officials interviewed. "Having a proper database of tax payers has improved the ability of the State to levy and collect taxes from tax payers and this in turn has increased the revenue base of the State". In addition, "the introduction of TIN has forced taxpayers to pay their taxes straight to the State's revenue account rather than remitting to tax collectors. This has dramatically reduced the level of corruption and collusion among tax payers and tax collectors which was rampant prior to the introduction of TIN". Finally, "TIN has exponentially improved the efficiency and effectiveness of tax assessment, tax collection as well as tax audits". All these positive consequences of TIN have made tax evasion much more difficult than was the case prior to 2012. Again, in line with the economic theory of criminal behaviour, these findings show that once business owners operating in Niger State realized that life would be more difficult than before if they refused to pay taxes due to the introduction of TIN, it led them to make a decision to reduce their levels of tax evasion. In addition, the introduction of TIN enabled the internally-generated revenue of the State to increase making more funds available for developmental initiatives. The findings of this study are in line with those of prior studies like Iheduru and Ajaero (2018) and Akinleye et al. (2019) who found that the institution of tax identification number led to a decrease in tax evasion and an increase in tax revenues in other parts of Nigeria.

Conclusion

The results of this study have provided evidence of the efficacy of TIN in reducing the prevalence of tax evasion in Niger State. The ten tax officials interviewed all agreed that tax evasion was extremely prevalent prior to the 2008 introduction of TIN due to the fact that the benefits of committing tax evasion far outweighed the likelihood of getting caught and the subsequent punishment that would follow. However, after the introduction of TIN, things changed as former tax evaders were now unable to enjoy many benefits such as opening bank accounts and getting access to bank loans if they did not pay their taxes. The introduction of TIN thus had a significant impact in lowering incidents of tax evasion among registered businesses in Niger State. These results indicate that the economic theory of criminal behaviour has strong explanatory power regarding why people commit tax evasion in the Niger State context.

It is, however, critically important to place the positive impact of TIN in reducing tax evasion in Niger State in proper context. Firstly, a majority of businesses of Nigeria generally and Niger State specifically are part of an unregistered and untaxed informal sector. The introduction of TIN thus does not affect this large group of businesses in the state who conduct their operations without paying taxes. In other to improve the effectiveness of TIN in reducing tax evasion and increasing the tax revenue base of the State, these informal businesses need to be formalized by getting them registered and issuing them Tax Identification Numbers. This can be achieved by offering them incentives to register such as free registration process and tax holidays for a specified period of time.

Secondly, it is important to understand why many businesses in Niger State, formal or informal, are so reluctant to pay taxes. The fact is that there is a deep mistrust of government by citizens of the State. This is as a result of a long history of failed promises of development and improvement of citizen welfare by succeeding administrations. Ideally, tax revenues are to be used to provide basic infrastructure such as roads, electricity, water and affordable healthcare; all of these amenities are supposed to improve the lives of ordinary citizens and create a more conducive environment for businesses to operate, thrive and prosper. Unfortunately, each succeeding year sees these infrastructure and amenities continue to diminish and dilapidate, further convincing business owners that paying taxes is simply lining the pockets of greedy and selfish politicians. Until the dividends of taxation become self-evident, businesses in Niger State are going to always find ways to evade taxes.

Thirdly, Niger State is endowed with over 76,000 km² of arable land, by far the most in the country. Additionally it has an abundance of mineral resources which are largely untapped. This abundance of resources if properly harnessed would mean that Niger State should not have to rely so heavily on tax revenues to achieve the State's developmental goals. Once citizens begin to see an improvement in the quality of infrastructure and amenities from the harnessing of these resources, they are more likely to be willing to pay taxes.

Although the results of this study have shown that the introduction of TIN has reduced tax evasion in Niger State, it is not without its limitations. The first limitation is the fact that only the opinions of tax officials were solicited to determine the efficacy of TIN. Future studies can include a cross-section of businesses so as to understand their own point of view. A second limitation is that only the opinion of ten tax officials were solicited with limits the generalizability of the results. Future studies can increase the sample size of tax officials by adopting a mixed methods approach which would involve surveying a larger sample of tax officials to supplement the interview of ten officials done in this study.

Ultimately, the job of every government is to create an enabling environment where citizens feel safe, comfortable and happy. The Niger State government has to do more to create such an environment so that the sense of civic duty will be reignited in the minds of business owners regarding their responsibility to pay taxes in order to contribute to a safe, prosperous and happy Niger State which all citizens hope for.

References

- Adama, O. (2018). Urban imaginaries: funding mega infrastructure projects in Lagos, Nigeria. *GeoJournal*, 83(2), 257-274.
- Agarwal, S., Li, K., Qin, Y., Wu, J., & Yan, J. (2020). Tax evasion, capital gains taxes, and the housing market. *Journal of Public Economics*, 188, 104222.
- Ahrens, L., & Bothner, F. (2019). The big bang: Tax evasion after automatic exchange of information under FATCA and CRS. *New Political Economy*, 1-16.
- Amponsah, S., Isshaq, Z., & Agyapong, D. (2019). Determinants of tax stamp evasion in rural districts in Ghana. *International Journal of Law and Management*, 61(1), 73-90.
- Andoh, F. K., Osoro, N. E., & Luvanda, E. (2019). Growth Dynamics of Value-Added Tax Revenue in Ghana. *Contemporary Economics*, 13(2), 147-174.
- Becker, G. S. (1968). Crime and Punishment: An Economic Approach (1968). *Journal of Political Economy*, 76(2), 169-217.
- Bernasconi, M., Levaggi, R., & Menoncin, F. (2020). Dynamic tax evasion with habit formation in consumption. *The Scandinavian Journal of Economics*, 122(3), 966-992.
- Bethencourt, C., & Kunze, L. (2019). Tax evasion, social norms, and economic growth. *Journal of Public Economic Theory*, 21(2), 332-346.
- Birungi, C., & Colbourn, T. (2019). It's politics, stupid! A political analysis of the HIV/AIDS Trust Fund in Uganda. *African Journal of AIDS Research*, 18(4), 370-381.
- Boolaky, P. K., Mirosea, N., & Singh, K. (2018). On the regulatory changes in government accounting development in Indonesia. *Journal of Accounting in Emerging Economies*, 8(3), 387-411.
- Bott, K. M., Cappelen, A. W., Sørensen, E. Ø., & Tungodden, B. (2020). You've got mail: A randomized field experiment on tax evasion. *Management Science*, 66(7), 2801-2819.
- Bouet, A., & Roy, D. (2012). Trade protection and tax evasion: Evidence from Kenya, Mauritius, and Nigeria. The Journal of International Trade & Economic Development, 21(2), 287-320.
- Brabenec, T., & Montag, J. (2018). Criminals and the price system: Evidence from czech metal thieves. *Journal of Quantitative Criminology*, 34(2), 397-430.
- Buckenmaier, J., Dimant, E., & Mittone, L. (2018). Effects of institutional history and leniency on collusive corruption and tax evasion. *Journal of Economic Behavior & Organization*, 1-18.
- Carfora, A., Pansini, R. V., & Pisani, S. (2018). Regional tax evasion and audit enforcement. Regional Studies, 52(3), 362-373.
- Casaburi, L., & Troiano, U. (2015). Ghost-house busters: The electoral response to a large anti–tax evasion program. *The Quarterly Journal of Economics*, 131(1), 273-314.
- Casais, B., Ferreira, M. R., & Proença, J. F. (2019). Social Marketing for the Reduction of Tax Evasion: The Case of Electronic Invoicing in Portugal. https://link.springer.com/chapter/10.1007/978-3-030-13020-6_11
- Casi, E., Spengel, C., & Stage, B. M. (2020). Cross-border tax evasion after the common reporting standard: Game over?. *Journal of Public Economics*, 190, 104240.
- Chiarini, B., & Marzano, E. (2019). A strategic approach for the crime of tax evasion. *Journal of Financial Crime*, 26(2), 477-487.
- Chiarini, B., Marzano, E., & Schneider, F. (2013). Tax rates and tax evasion: an empirical analysis of the long-run aspects in Italy. *European Journal of Law and Economics*, 35(2), 273-293.

- Church, B. V., McGowen, P., & Abernathy, C. (2013). Fuel Tax Evasion via the Fuel Tax Refund Process. *Transportation research record*, 2346(1), 49-55.
- Das, P. K. (2019). Impact of Demonetization on Indian Economy. *American Journal of Business and Management*, 8(1), 18-27.
- De Simone, L., Lester, R., & Markle, K. (2020). Transparency and tax evasion: Evidence from the foreign account tax compliance act (FATCA). *Journal of Accounting Research*, 58(1), 105-153.
- Eccleston, R., & Gray, F. (2014). Foreign accounts tax compliance act and American leadership in the campaign against international tax evasion: revolution or false dawn?. *Global policy*, *5*(3), 321-333.
- Eja, B. R., Idaka, S. E., & John, O. A. (2018). Inhibiting factors to tax revenue generation in Cross River State, Nigeria. *Global Journal of Social Sciences*, 17(1), 11-19.
- Elgin, C., & Erturk, F. (2019). Informal economies around the world: Measures, determinants and consequences. *Eurasian Economic Review*, 9(2), 221-237.
- Filer, R. K., Hanousek, J., Lichard, T., & Torosyan, K. (2018). 'Flattening'tax evasion? Evidence from the post communist natural experiment. *Economics of Transition and Institutional Change*, 27(1), 223-246.
- Fjeldstad, O. H., Orre, A., & Paulo, F. (2020). The non-oil tax reform in Angola: Escaping from petroleum dependency? *The Extractive Industries and Society*. https://doi.org/10.1016/j.exis.2020.05.009
- Górecki, M. A., & Letki, N. (2020). Social Norms Moderate the Effect of Tax System on Tax Evasion: Evidence from a Large-Scale Survey Experiment. *Journal of Business Ethics*, 1-20.
- Iheduru, N.G., & Ajaero, O.O. (2018). Tax Identification Number and Non-Oil revenue: A Comparative Analysis of Pre and Post Tax Identification Number. *Journal of Accounting and Financial Management ISSN*, 4(8), 9-19.
- Immordino, G., & Russo, F. F. (2018). Cashless payments and tax evasion. *European Journal of Political Economy*, 55, 36-43.
- Johannesen, N. (2014). Tax evasion and Swiss bank deposits. *Journal of Public economics*, 111, 46-62.
- Kemme, D. M., Parikh, B., & Steigner, T. (2017). Tax havens, tax evasion and tax information exchange agreements in the OECD. *European Financial Management*, 23(3), 519-542.
- Khambule, I. (2018). Imagining an institutionalised social dialogue in the South African local government-led development landscape. https://www.tandfonline.com/doi/abs/10.1080/08039410.2017.1391 875
- Kirchler, E. (2019). Strengthening Tax Compliance by Balancing Authorities' Power and Trustworthiness. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3457245
- Koessler, A. K., Torgler, B., Feld, L. P., & Frey, B. S. (2019). Commitment to pay taxes: Results from field and laboratory experiments. *European Economic Review*, 115, 78-98.
- Kumar, N. (2019). Closing the Gaps in Social and Physical Infrastructure for Achieving Sustainable Development Goals in Asia and the Pacific. *Millennial Asia*, 10(3), 372-394.
- Lee, N., & Swenson, C. (2017). Solving the tax evasion problem by co-opting the public: the Korean cash receipts system. *Asia-Pacific Journal of Accounting & Economics*, 26(4), 362-381.

- Masclet, D., Montmarquette, C., & Viennot-Briot, N. (2019). Can whistleblower programs reduce tax evasion? Experimental evidence. *Journal of Behavioral and Experimental Economics*, 83, 101459.
- Menkhoff, L., & Miethe, J. (2019). Tax evasion in new disguise? Examining tax havens' international bank deposits. *Journal of Public Economics*, 176, 53-78.
- Nagel, H., Huber, L. R., Van Praag, M., & Goslinga, S. (2019). The effect of a tax training program on tax compliance and business outcomes of starting entrepreneurs: Evidence from a field experiment. *Journal of business venturing*, 34(2), 261-283.
- Nawawi, A., & Salin, A. S. A. P. (2018). Capital statement analysis as a tool to detect tax evasion. *International Journal of Law and Management*, https://doi.org/10.1108/IJLMA-03-2017-0024
- Ndiritu, S. W., & Engola, M. K. (2020). The effectiveness of feed-in-tariff policy in promoting power generation from renewable energy in Kenya. *Renewable Energy*. https://doi.org/10.1016/j.renene.2020.07.082
- Olivares, B. D. O. (2019). The impact of GDPR on European Name & Shame tax defaulter lists. *Computer Law & Security Review*, 35(3), 241-250.
- Olokooba, S. M. (2019). Taxpayers Rights and Obligations Under the Nigerian Tax Charter. https://link.springer.com/chapter/10.1007/978-981-13-2607-3_5
- Peprah, C., Abdulai, I., & Agyemang-Duah, W. (2020). Compliance with income tax administration among micro, small and medium enterprises in Ghana. *Cogent Economics & Finance*, 8(1), 1782074.
- Sabet, N. S., & Khaksar, S. (2020). The performance of local government, social capital and participation of villagers in sustainable rural development. *The Social Science Journal*, 1-29.
- Sebele-Mpofu, F. Y. (2020). Saturation controversy in qualitative research: Complexities and underlying assumptions. A literature review. *Cogent Social Sciences*, 6(1), 1838706.
- Sanchez, O. (2011). Fighting tax evasion in latin america: The contrasting strategies of chile and argentina. *Third World Quarterly*, 32(6), 1107-1125.
- Semerád, P., & Bart ková, L. (2016). VAT control statement as a solution to tax evasion in the Czech Republic. *Procedia-Social and Behavioral Sciences*, 220, 417-423.
- Tax Justice Network (2020). Estimates of tax avoidance and evasion. https://www.taxjustice.net/topics/more/estimates-of-tax-avoidance-and-evasion/
- Vu, G. C. (2018). Control of public official's assets and incomes in Vietnam. *Jindal Global Law Review*, 9(1), 75-92.
- Weerasekera, H. (2018). Tax Rates and Tax Evasion: An Empirical Investigation of Border Tax Evasion in Sri Lanka. *South Asia Economic Journal*, 19(2), 229-250.
- Wilks, D. C., Cruz, J., & Sousa, P. (2019). "Please give me an invoice": VAT evasion and the Portuguese tax lottery. *International Journal of Sociology and Social Policy*, https://doi.org/10.1108/IJSSP-07-2018-0120
- Yousefi, K., Vesal, M., & Pilvar, H. (2019). Import tax evasion and avoidance: Evidence from Iran. *The Quarterly Review of Economics and Finance*, 75, 31-39.