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Understanding Tax Compliance in the Informal Sector in a Developing or Emergent Economya Case Study of Nyarugenge District Rwanda

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Introduction- *Background of the study:* Existence of governments and the social and political contracts between the governed and those who govern them is a central feature of modern society. The governed entrust those who govern them with the responsibility to provide security as well as physical and social infrastructure, among others, to live and enjoy quality life. They owe the mutual responsibility, to pay taxes.or other levy to the governers. (Edame & Okoi, 2014).

The first known system of taxation was in Ancient Egypt around 3000–2800 BC in the first dynasty of the Old Kingdom. The earliest and most widespread form of taxation were the corvée and tithe. In an organised society, tax is the price paid for civilisation. Such society needs a well-financed administrative structure. Therefore, taxation in its different forms has existed as long as society had the minimum elements of government (Taxation Handbook, 2015).

Keywords: *Informal sector, tax compliance, developing countries, principles.*

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UNDERSTANDINGTAXCOMPLIANCEINTHEINFORMALSECTORINADEVELOPINGOREMERGENTECONOMYACASESTUDYOFNYARUGENGEDISTRICTRWANDA

Strictly as per the compliance and regulations of:

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I. Introduction

a) Background of the study

Existence of governments and the social and political contracts between the governed and those who govern them is a central feature of modern society. The governed entrust those who govern them with the responsibility to provide security as well as physical and social infrastructure, among others, to live and enjoy quality life. They owe the mutual responsibility, to pay taxes. or other levy to the governers. (Edame & Okoi, 2014).

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b) Benefits of taxation

Taxes are often resisisted. However without taxes or some other form of levy, society would ground ton a halt. It provides the means of expenditure by those in authority to provide quality of life commensurate with the value the governed extend. Secondly, it is a means to distribute wealth. The rich would exploit the resources wihout those with similar aceess benfitinng. It would be exploitative and most likely there would be social and political uprising. Finally, it provide a means of social and economic recognition, with those paying higher taxes earning bigger recognition.

II. Objectives of The Study

The research was carried out with the following objectives:

1. To identify the challenges faced by tax collectors in Nyarugenge District, Rwanda
2. To show the challenges which prevent informal traders form paying taxes in Nyarugenge District, Rwanda
3. To analyze the relationship between informal trade and tax compliance in Nyarugenge District, Rwanda

III. Justification and Significance of the Study

Tax compliance is a matter of great concern to governments and tax payers, in both developed and developing countries. By answering the question of the study, we believe findings of this research would assist the government of Rwanda and other countries to formulate appropriate policies that motivate tax payers to comp In addition, other researchers will benefit from the findings and pursue more research in this and other related areas.

IV. Literature Review

Tax compliance refers to fulfilling all tax obligations as specified by the law, freely and completely, and it includes submitting a tax return within the stipulated period, correctly stating income and deductions and paying assessed taxes by due date (Atawodi & Ojeka, 2012). Tax compliance has also been defined as the ability of taxpayers to meet their statutory obligations under the tax laws that require them to file tax returns and pay taxes promptly (Abdul-Jabbar & Pope, 2008).

Factors which contribute to compliance and non-compliance

Various factors contribute to either tax compliance or its antithesis, non-compliance. Governmental policy effectiveness, transparency of the tax system as well as voice and accountability are perceived to be key grounds for tax compliance or non-compliance. As aspects of tax administration, they significantly influence variances in tax compliance (Nkundabanyanga et al, 2017).

Justice, actual or perceived, inherent in a tax administration system affects the level of compliance by the taxpayers. There are three types of justice in taxation systems, namely, distributive justice (viewed as the

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exchange of resources, that is, benefit and cost); procedural justice (viewed as the process of resource distribution) and retributive justice (viewed as the appropriateness of sanctions when norm-breaking occurs).Tax compliance behavior of the taxpayer will be in response to whether the procedure is just or not. Retributive justice is a theory of punishment that when an offender breaks the law, justice requires that they suffer in return, and that the response is proportional to the offence (Sellywati et al, 2017). Modern tax systems rely heavily on voluntary compliance for revenue collection. Very clear understanding of why taxpayers meet their obligation s or fail to do so or of how much tax liability is uncollected is critical for measuring administrative performance and for targeting compliance strategies (John & Liucija, 2007).

Tax compliance continues to be a critical problem in developing and emergent countries. Goverments have to ever widen the tax net through concerted combination of more enforcement and moral suasion, as well as technology-based improvements (Anirudh, 2019).Deterrence models generally predict compliance patterns based solely on the subjective probability and utility of outcomes associated with alternative actions. Yet recent work in behavioral decision theory suggests that compliance decisions may also be affected by how the risks of noncompliance are described and how the decision-maker's preferences are expressed. Cognitive heuristics evoked by these descriptive and procedural variables affect tax compliance. It was found in a study that taxpayer preferences are significantly influenced by descriptive and procedural variables that traditional expected utility models ignore. Using tax decision problems involving how to choose a tax professional, whether to take a questionable deduction, and how to approach an impending tax audit is crucial for a taxpayer. (Casey & Scholz, 1991).

Non-compliance tax models in the 1970's assume that tax payers are rational actors aiming for benefits. They compare the cost of compliance with the utility of tax non-compliance. As such, they will be non-compliant when the expected penalty and probability of being caught are rather small compared to the utility gained by non-compliance (Michael & Agnar, 1972).

Following the classical economic model of tax non-compliance, governments and tax authorities should seek to ensure that the utility of non-compliance is outweighed by the cost of non-compliance. To achieve this the main tools used are increased penalties and the perceived probability of detection of the non-compliant tax payers. In practice it has been noted that reducing tax non-compliance is not just a matter of applying higher penalties or alternatively increasing the probability of detection as the model suggest or both. This has necessitated the search for alternative models which take into account the non-pecuniary aspects of the tax compliance decision (Horodnic, 2018). Recent approaches to tax compliance studies have been based on social and psychological theories with argument that the human element plays a vital role in individual taxpayer compliance decisions. Tax compliance literature indicates that there are still many research gaps that need to be filled with respect to issues concerning tax morals, tax fairness and deterrence measures, for the likely improvement in overall taxpayer compliance (Devos, 2014).

That taxpayers' decisions on paying taxes or not paying taxes cannot be explained only by expected economic gains and costs alone. There are many psychological, sociological and demographic variables affecting taxpayer decisions. It will be possible for tax administration to increase tax compliance and tax collection to a degree with conventional tools and practices. Beyond legal obligations, it is necessary to analyze the ethical-cultural norms of the individuals and the society and the behavior of taxpayers and to produce the requisite policy accordingly, so as to increase the voluntary tax compliance and motivate the taxpayer (Serdar, 2019).

The potential for behavioural research to contribute to better tax collection and administration has been quite limited. Effective tackling of the task requires a better understanding of attitudes and behavioural motivations of taxpayers against taxation so as to improve both voluntary compliance and tax administration efficiency. Some of the important factors influencing fiscal behaviour are discouragement; personal and social norms; fairness and trust in the tax administration; complexity of the tax system; the role of government and the broader economic environment. A contemporary healthy tax system does not mean exclusively a series of norms and the increase or decrease of the amount of taxes, duties and contributions. Rather it also entails a long history in which it was created and stratified, mindful of a certain behavioural culture of taxpayers which has been shaped in a manner that facilitates the proper operation and compliance with the norms and the consolidation of good practices in the field (Mitu, 2016)

Behavioral economics and economic psychology are other disciplines that have been leveraged to explain tax compliance and non-compliance. They cover areas such as rational and irrational decision-making; social representations about taxes, as well as the interaction between tax authorities and taxpayers. From behavioral finance in particular rational choice and tax payments have been addressed from the point of view of prospect theory, mental accounting and framing effects to explain social representations and provide knowledge and understanding of taxation, attitudes and beliefs, personal and social norms, as well as distributional and procedural justice (Olsen & Kirchler, 2018).

The theory of planned behavior (TPB) has also been used to investigate the issue of tax compliance. It is based on the notion that there are three components to behavior: attitude, subjective norms, and perceived behavioral control. Seven determinants have been developed to study tax compliance intention, namely, tax morale, tax fairness, trust in government, perceived power of authority, tax complexity, tax information, and tax awareness. Findings are that tax morale, tax fairness and tax complexity have a statistically significant influence on the tax compliance intention of the citizens. It has been further proven that the power of authority, trust in government, tax information, and tax awareness do not show a statistically significant relation to tax compliance intention (Heang &Yongjin, 2020).

A study was carried out on factors that determine tax compliance attitude and perception in Kenya, Tanzania, Uganda and South Africa. Findings were that in Kenya and South Africa, citizens who perceive that it is difficult to avoid taxes are more likely to have a tax compliant attitude than citizens who think avoidance is relatively easier. Evidence was also found that individuals who are more satisfied with public service provision are more likely to have a tax compliant attitude in all the four countries. On the other hand, frequent payment to non-state actors, for instance criminal gangs, in exchange for protection, reduces likelihood to have tax compliant attitude. In addition, in Tanzania and South Africa it was established that individuals who perceive that their ethnic group is treated unfairly by the government are less likely to have a tax compliant attitude. The degree to which respondents perceive that it is difficult to know what taxes to pay is also negatively correlated with tax compliant attitude in these two countries. Tax compliance attitude in Uganda is low, mainly because of the low perception about the quality of public services provided among tax payers (Ali, 2013).A study by the World Bank of a cross-section of Ugandan firms shows that an adverse business environment characterised by inadequate Government provision of public capital, bureaucratic bribery and an inefficient legal and regulatory environment could potentially induce a firm's behaviour towards tax evasion (World Bank Group, 2017).

V. The Informal Sector

The definition of what the informal sector is has most times been characterised by negative connotations such as activities that are unrecognized, unrecorded, unprotected or unregulated by public authorities, although it is not confined to marginal activities but also included profitable enterprises. The sector has also been referred to as the shadow, hidden, black, underground, gray, clandestine, illegal, unreported, non-cash and parallel economy (Thomas, 2002).

Researchers have defined the informal sector or economy variously according to what best fits with the object of their own analysis. For example, one school of thought discriminates between registered or unregistered economic activity (Joshi et al., 2013),

The term “informal sector” was first used in a study of informal income opportunities in urban Ghana, involving the Frafras, one Northern Ghanaian group, as migrants to the urban areas of Southern Ghana. In this study the economic activities of the low-income section of the labour force in Accra, the urban sub-proletariat into which the unskilled and illiterate majority of Frafra migrants are drawn were described. As a result of Price inflation, inadequate wages, and an increasing surplus to the requirements of the urban labour market, there was a high degree of informality in the income-generating activities of the sub-proletariat. Given the uncertainty related to the economic activities of the members of the communities studied, income and expenditure patterns were more complex than is normally allowed for in the economic analysis of poor countries. This made evaluation of economic activities difficult as was determination of tax payable (Harth, 1973).

The phrases informal sector and informal economy have been interchangeably used in much of economics literature. It constitutes an important component of most economies. It contributes between 25 and 65 percent of GDP and between 30 and 90 percent of total non-agricultural employment in most economies. The trend is likely to continue with the informal economy in sub-Saharan Africa likely to remain large for many years to come. This should not be cause for worries, because the informal sector presents both opportunities and challenges for policymakers. During the five years period between 2010-14, Sub-Saharan Africa unweighted average share of informality reached almost 38 percent of GDP. It was only surpassed by Latin America and the Caribbean, which registered a higher rate at 40 percent of GDP. The comparative figures for South Asia and Europe are 34 percent and 23 percent of GDP in South Asia and Europe respectively. For the Organisation for Economic Co-operation and Development (OECD) member countries, the informal sector is estimated to account for 17 percent of GDP. With limited opportunities in the formal sector, informal activity avails an essential social and economic safety net by providing employment and income to a large number of otherwise vulnerable people. It also offers means to poverty reduction. Between 30 to 90 percent of employment in the non-agricultural sector occurs in the informal sector in some sub-Saharan African countries (IMF, 2017)

Other studies have also confirmed the findings above. The importance of the informal sector is equally important in other parts of the world. Estimated average size of informal economy on tax revenue as a percentage of GDP was 37.4 % in Peru, in Latin America it was 34 % while in OECD countries it was 19.89 % (Guillermo & Deyv, 2019).

In cities worldwide the informal sector offers a high proportion of employment ranging between 80% on average in Abidjan, Bamako, Cotonou, Dakar, Lomé, Niamey and Ouagadougou, 59% in Lima, Peru, 53% in Ho Chi Minh City, Vietnam and 45% in Buenos Aires, Argentina(Herrera et al 2012).

VI. Taxation of the Informal Sector

The issue of taxation of the 'informal economy' in developing and emergent economies has received increasing attention in recent years as has been that of whether indeed taxation of the informal economy is justified. Questions have been raised regarding the issue with critics arguing that the potential revenue yields are low, administrative costs are high, tax incidence is likely to be regressive, and tax enforcement risks exposing vulnerable tax payers to harassment (Keen, 2012).

Failure to pay taxes is not an issue of formality or informality. Thus, reducing informality cannot form the basis of tax policy, because the reasons for not paying taxes vary across both informal and formal sectors. For example, believing that tax rates are unjustifiably high or that there is no evidence of benefits arising from taxes paid are reasons pertinent to firms in both formal and informal sectors. Accordingly, in designing tax policy, the reasons for not paying taxes matter as much as or more than the fact that a firm pays no taxes. (Kanbur & Keen 2015).

Taxes from the informal sector have a significant effect on capital development. In a study carried out in the Lagos Metropolis, among the conclusions made was for government not only to create an enabling environment for the informal sector but also give all necessary support for its survival because the sector has contributed immensely to the capital development of the state. It was recommended that the government should continue with its capital development programs by constructing more roads, building hospitals, schools and markets in order to gain the trust of the citizenry (Andy et al 2019).

In a study on informal sector tax compliance issues and the casualties between taxation and economic growth in Ghana, empirical evidence findings revealed that attitudes, subjective norms, and perceived behavioural control were the main determinants of the informal sector compliance factor, and it was recommended that efforts should be geared towards improving tax systems to augment the GDP of the country (Ameyaw et al, 2016). In neighbouring Nigeria, a study carried out in River State findings were that taxing the informal sector boosted revenue generation and positively affected the economic development of developing states in Nigeria (Obara & Nangih 2017).

Tax non-complince is more pronounced in developing and emerging countries. There is no single theory that can explain the phenomenon of tax noncompliance behaviour, however perception and attitude of taxpayers are among the factors contributing towards compliance behaviour. Empirical evidence indicates that taxpayers act according to their belief and attitudes. A framework focusing on tax service and public governance indicates that quality as well as tax system structure are factors relevant to developing and least developing countries, in as far as promoting tax compliance is concerned (Lutfi et al ,2015). There should be greater reliance on locally grounded binding constraints analysis. This must be coupled with careful attention to understanding politics and the drivers of trust in particular contexts, to guide analysis of how best different investments may be combined, prioritized, or sequenced (Wilson et al 2019).

Recent interest in the matter of taxing the informal sector has been catalyzed by growing attention to the potential benefits of informal sector taxation in terms of revenue, growth, and governance. With respect to revenue, the informal sector forms a large and, in many countries, growing share of GDP, and thus represents a potentially significant source of tax revenue for cash-strapped governments (Schneider & Montenegro, 2010).

a) The informal Sector in Rwanda

In Rwanda, the informal sector refers to establishments that are not registered with the revenue authority body (RRA) to pay local or national taxes and do not maintain regular operational accounts:(NISR, 2014).Over time Rwanda has recorded significant growth in the formal sector, and the percentage level of the formal private sector and the government of Rwanda's Vision 2020 explicitly promotes private sector development and recognises the informal sector as a key part of the economy. Nevertheless, there is need for concerted effort to expand the formal sector because it enables business enterprises to effectively plan for their future investments and expand their business activities. The expansion would increase domestic revenues (Rukundo, 2015).

In Rwanda the informal sector is an enterprise that employs one to nine people. It covers a wide sector and it includes manufacturing, trading, and services. The sector includes market traders, artisans (mechanics, technicians), cottage industrialists, petty hawkers, transport workers, small shops, and micro businesses. Built on experience, a progressive tax system is capable of reducing the chances of evading taxes because it eliminates the onus of self-assessment from the informal sector, such that the duty of evaluating taxable income rests on the tax authority (Adesoji &

Chike, 2016) There is growing evidence that taxing the informal sector encourages them to be more organised and practice better management by way of keeping proper financial and accounting records (Oduwole & Sanni, 2014). When considering the merits of committing scarce resources to taxing small informal sector firms, debate has frequently focused on limited revenue potential, high costs of collection and potentially perverse impacts on small firms. By contrast, recent arguments have increasingly emphasised more indirect benefits of informal sector taxation in relation to economic growth, tax compliance and governance. These potentially broader benefits are increasingly finding support in recent research, but they are contingent on government support and consequently demand further attention. Encouraging tax compliance demands not only lowering costs but also strengthening the potential benefits of formalisation, from increased security to new economic opportunities. Successful reform needs political support from political leaders, tax administrators and taxpayers alike. It also requires institutional reform (Anuradha et al, 2013).

The issue of paying tax is a primary nexus between the individual (taxpayer) and the state. Tax laws are examples of purposive administrative law. Compliance is as problematic as non-compliance and tax payers, be they individuals or bodies corporate, have different opportunities for both compliance and noncompliance, and paying tax does not necessarily involve deliberate decisions. Four clusters of factors affecting the content of compliance decisions are material consequences, normative expectations, sociolegal attitudes and beliefs as well as expressive factors (Kent & Kinsey, 1987).

VII. Resistance to Registration for Tax Purposes

In previous studies efforts have been made to find out reasons for not registering for taxes, and self-reported expected tax obligations. One such study was carried out by the World Bank involving small enterprises in Katwe area of Kampala, Uganda in 2011.

Despite the numerous benefits of taxation to the economies of various countries there are various reasons as to why potential tax payers do not register for purposes of taxation, as table 1 below indicates (Dekoya et al, 2020).

Table 1: Reasons for not registering for taxes, and self-reported expected tax obligations

Reason for not registering for taxes	*Share (%)*		*Expectation of annual tax obligations*	*Actual annual tax obligations*		*Monthly turnover*
		Median	Mean	Median	Mean	Mean
High registrationcost	1.5	86,000	224,125	100,000	158,333	950,000
Too small to pay taxes	53.0	50,000	111,645	100,000	1,026,803	550,000
Taxes are too high	12.0	95,000	254,943	100,000	1,440,034	1,075,000
No action will be taken	1.0	40,000	60,167	200,000	200,000	750,000
Too complicated process	0.7	235,000	380,000	100,000	180,000	1,140,000
No time to register	3.2	50,000	195,263	216,000	210,571	1,000,000
Do not know what the TIN is	11.5	50,000	941,045	100,000	1,001,687	800,000
Business is just not registered	9.3	60,000	138,058	100,000	1,455,412	500,000
Do not know where to register	3.4	100,000	276,158	100,000	608,000	650,000
Other Specify	4.4	50,000	70,625	100,000	2,460,150	575,000

Source: World Bank 2011 Survey Report

In table 1 above, tax obligation refers to what enterprise owners would have been expected to pay if they had been registered for tax purposes. As is noted from the table over half of the interviewees (53%) believed their businesses were too small to be taxed. This was distantly followed by the argument that taxes were too high at 12%, closely followed by the potential taxpayer's lack of knowledge of the Taxation Identification Number (TIN) at 11.5%. With the overwhelming belief that one's business is too small to be taxed, even if the rates were lowered there has to be a very big reduction for one to even remotely think about paying the tax. Indeed, with the two leading arguments for not registering, it would be surprising if a potential taxpayer bothered to know the TIN.

Apart from the reasons given above for not registering, arguments are raised against taxing the informal sector. Low levels of revenues relative to costs incurred in collecting taxes from the informal sector is one of the major arguments. Taxable incomes are usually low or non-existent. Secondly given that majority of informal sector workers are the underprivileged or marginalized, the rural women and youths or those from the ghettos, there is a high possibility that taxation of the informal sector risks being highly income and gender regressive (Pimhidazai & Fox,2012).

VIII. Theoretical Framework

Taxes impact on society in various ways because they are socio-political-economic tools which, through the ways the proceeds are utilized, can greatly change the quality of life people in a community live. A lot of theories have therefore evolved to explain many aspects of taxes and taxation. Some of these are the subject matter of discussion below.

a) *Canons of taxation*

A Scottish economist argued for a systematic approach to matters of taxation and believed that a tax must be levied on the basis of rules he called canons of taxation. These were equity or ability, certainty, economy and convenience (Adam, 1776).

Table 2: Adam Smith's Cannons of Taxation

Canon	Adam Smith's observation
Equity or ability	The subject of every state ought to contribute towards the support of the government as nearly as possible in proportion to their respective abilities, that is, in proportion to the revenue which they respectively enjoy under the protection of the state
Certainty	The tax which each individual is bound to pay ought to be certain and not arbitrary. The time of payment, the quantity to be paid, ought to be very clear and plain to the contributor and to every other person.
Economy	Every tax ought to be so contrived as both to take out and keep out of the pockets of the people as little as possible over and above what it brings in to the public treasury of the state.
Convenience	Every tax ought to be levied at the time and in a manner in which it is most likely to be convenient for the contributors to pay it.

Source: Adapted from the An Inquiry into the Nature and Causes of the Wealth of Nations

Adam Smith's canons of taxation outlined above are as valid and sound today as they were in 1776. That his book An Inquiry into the Nature and Causes of the Wealth of Nations came out in five editions during Adam Smith's lifetime, in1776, 1778, 1786 and 1789 is not surprising. All theories and principles of taxation that were postulated later, directly or indirectly derive from these four pillars propounded by the greatly endowed Adam Smith. Indeed, non-compliance arises because of breach of one or several of the canons. A tax that is not equitable, certain, economic or convenient as indicated above provides room for non-compliance. Breach of the cannons of taxation as propounded by Adam Smith will most likely result into non-compliance. Thus, for example a complex tax which the taxpayer does not understand or one which requires the taxpayer to go through a costly process and involving travel to regional tax offices and therefore uneconomic from the taxpayer's point of view is likely candidate for involuntarily evasion. Compliance costs of taxation include three major components, namely money costs, time costs and psychological costs to the taxpayers. Expenditure on professionals such as tax consultants and accountants, investment advisors, tax agents and legal practitioners as well as expenses relating to taxation guides, books and other incidental costs such communication, stationery and travel is referred to as money costs. When these compliance costs are high, they can lead to tax evasion, avoidance or both (Sandford & Hardwick, 1989).

b) *The Sacrifice or Ability to Pay theory*

The sacrifice (or ability to pay) theory derives form Adam Smith's canon of equity as outlined above. He believed that tax payers should make contributions to the public coffers in proportion to the revenue which they enjoy under the protection of the state' (benefits) and also in proportion to 'respective abilities '(ability to pay) which are reflected by the revenues they derive from the economy. It was generally agreed that this not only just but it was also equitable. This principle seeks to ensure that tax subjects the taxpayers to an equal sacrifice (Clifton et al, 2001). This is through introduction of the principle of progression in the tax system. By paying the taxes the individual sacrifices in the form of foregone alternative uses of money paid in terms of taxes. Because equity is concerned with the fair distribution of the tax burden, the ability to pay principle should also consider the incidence of a tax, as the formal incidence, and this is because the person on whom the tax is levied, is not necessarily the same person who actually bears the burden of the tax (Peter & Helen, 2009).

c) The Benefit Theory

The Benefit theory, also known as the insurance theory or the Quid Pro quo theory of taxation, relates the sacrifice of the taxpayer in paying the taxes with the benefits they enjoy from governmental expenditure. The benefit theory states that the taxation should be in accordance with the benefit enjoyed by a taxpayer from the facilities or services provided by the Government (Jon, 2000). The theory has been criticized on various aspects. The poor or underprivileged receive greater benefits from the government in the form of free social services like education and health yet they are the least able to bear the burden of taxation. It is also difficult to record every single taxpayer's benefit. Furthermore, the intensity of desire by a particular taxpayer for service from government is difficult to quantify, and therefore it is equally difficult to determine how much the beneficiary is prepared to pay for it.

d) The Principle of Maximum Social Advantage

Economic welfare of the community is the goal of state's economic policy. The Principle of Maximum Social Advantage extends the ability-to-pay principle to include the benefits of public expenditure in that it seeks to balance the social advantage of public expenditure and the social sacrifice involved in the payment of taxation. It is alternately called the Principle of Maximum Aggregate Welfare or the Principle of Maximum Social Advantage. It is criticized from the point of view that it is difficult to determine the measures which will lead to maximum social advantage (Ngerebo, 2010).

e) Principle of Productivity

To justify its imposition a tax should produce for its government sufficient revenue. Taxes should be productive. The principal tallies with the economy canon propounded by Adam Smith. To justify its imposition. The principle demands of government selection of a few taxes yielding sufficiently large revenues as opposed to a multiplicity of taxes, to avoid high cost of collection, relative the amount collected. This should be so in the medium and long term. The cost-benefit analysis point of view of the principle is attractive because it is logical (Tuan, 2016).

f) Principle of Elasticity or Flexibility

The economic or financial systems in which taxes are charged and collected is dynamic. This in turn requires that the tax system should have the capacity to adjust itself in the ever changing globalised environment. The tax system should be fairly elastic so as to enable government, if it deems it necessary for example to raise more funds, to do so without incurring exorbitant costs in this endeavour (Saez & Giertz, 2012).

g) Principle of Simplicity

Tax systems should be simple, tax laws should be clear and easily understandable to the common man. Simplicity reduces the cost of collection of taxes and inconvenience to the taxpayers. A Complex tax system breeds corruption in tax administration and may lead to temptations for non-compliance. The taxes should be simple to calculate and encourage self-assessment also to some extent. The basis of arriving at tax liability should be easy to comprehend, tax bands where applied should be logical, the rates should be moderate, the manner and timing of payment should be convenient (Philippe, 2017)

h) The lifeblood theory

The theory posits that the system of taxation works like a blood circulatory system. Taxes flow into the government coffers and through government expenditures the taxes flow back into the economy to fund infrastructure and services, among others. Providers of the labour and material inputs are taxed on the profits they generate from their businesses or earnings received as salaries, and the cycle continues (Ajay, 2018).

i) Principle of Diversity

Just like businesses manage risk partly through portfolio diversification, governments should adopt similar strategy in evolving fiscal policy (Federico ,2018). Sectors enjoy success or suffer losses differently because the nature of their activities differ. Agriculture depends very much on the vagaries of nature especially in least developed economies. Issues of climatic change are heavily impacting on the sector. The manufacturing and services sector are impacted upon by basically different factors. Government should therefore be cognizant of the risk posed by a narrow tax base which would expose it to shocks when the few sectors suffer negative revenue trends and consequently losses and falling taxable income. Indeed, diversification also satisfies the canon of equity, by covering as many taxpayers and sectors as possible, instead of burdening a few Chowdhury (2015).

j) conceptual frame work

A conceptual framework is a structure which the researcher believes can best explain the natural progression of the phenomenon to be studied (Camp, 2001). It is arranged in a logical structure to provide a picture or visual display of how ideas in a study relate to one another and it assists the researcher in identifying and constructing his/her worldview on the phenomenon to be investigated (Grant & Osanloo, 2014). We had dependent and independent variables which are informal trade as the independent and tax compliance as the dependent variable.

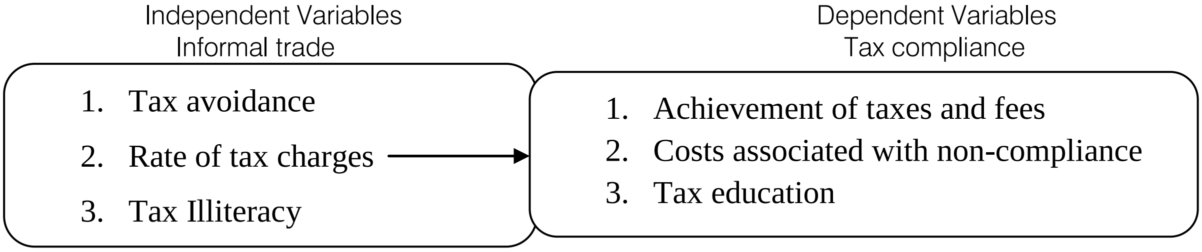

Figure 1: Source: Researcher conceptualization (2006)

IX. Research Methods and Tools

In any research the appropriateness of the methods and tools used contributes a lot on to how the findings of the particular study are reliable and valid.

a) Research design

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. It is the conceptual structure in which research is conducted. It constitutes the blueprint for the collection, measurement and analysis of data. It includes an outline of what the researcher did from writing the hypothesis or research question and its operational implications to the final analysis of data (Kothari, 2004).Both primary and secondary sources were used. The study used a combination of cross sectional and descriptive designs in which both qualitative and quantitative approaches were adopted. Questionnaires were administered to respondents who answered both open-ended and close-ended questions. Quantitative data was analysed by means of frequencies, percentages and means correlations to arrive at conclusions. A sample of 14 employees and 96 informal traders were involved.

b) Procedures and techniques used for gathering data

We wrote a letter requesting for permission to collect data to the Major of Nyarugenge district who in turn gave an authorization letter to the Executive Secretaries of sectors. These helped in identifying the informal traders and the tax collectors. While collecting data, we obtained relevant information by repeating and putting clear questions to the respondents.

c) Study population

Population refers to an aggregate or totality of all the objects, subjects or members that conform to a set of specifications (Polit and Hungler, 1999). We collected and analyzed the views of Nyarugenge district's informal traders and tax collectors. The targeted population was 4,800 operators in the informal sector and 14 tax collectors of Nyarugenge district. The distinction between informal traders and tax collectors in administering questionnaires was based on the fact that informal traders may live their own experiences in not paying taxes which may be different from those lived by tax collectors in collecting taxes. This is presented in table 3 below.

Table 3: Targeted population

Population category		Population under study
Informal traders		4,800
Tax collectors		14
Total		4,814

Source: Nyarugenge District Department of Finance

d) Interview technique

An interview can be defined as a conversation between an interviewer and the respondent contacted for the purpose of obtaining information. Two types of interviews were used in this study, that is, the formal or structured interview and the informal or unstructured interview. The structured is based on questions predetermined and specific before the onset of the interviews. The unstructured arise out of the responses to the formal interview. The unstructured interview was conducted to obtain complementary tax collection information.

e) Questionnaire

The questionnaire was one of the tools used during the study to collect data. It was in Kinyarwanda, the mother tongue of respondents. This questionnaire comprised both closed and open-ended questions which enabled a mix of qualitative and quantitative information to be gathered. The questionnaire was presented in form of nominal and 5- Likert scale as described in table 4 below.

Table 4: Definitions of Scale

Response	Mean Range	Scale	Interpretation
Strongly Agree	4.20 - 5.00	5	Very High
Agree	3.40 - 4.19	4	High
Undecided	2.60 - 3.39	3	Average

Disagree	1.80 - 2.59	2	Low
Strongly Disagree	1.00 - 1.79	1	Very Low

f) Sample size

In selecting the respondents, the researchers used convenience and purposive sampling strategies. Convenience sampling is non-probability sampling where the information is collected from the members of the population who are conveniently or readily available to provide it (Sekaran,2003). Purposive sampling is a type of sampling whereby the researcher uses own judgment or common sense regarding the participants from whom information will be collected (Amin, 2005). Given that the population of informal traders and tax collectors is fairly homogeneous on the information required, we used this technique in selecting the taxpayers, tax collectors and other employees such as Director of Finance, Revenue accountant and Revenue inspectors who were available during the distribution of questionnaires. See table 5 five below.

Table 5: Sample size

Strata (Sector)	Number of personnel	Sample size	Justification
Taxation department	8	8	Convenient
Top management	4	4	Convenient
Tax payers	84	84	Convenient
Total	96	96	Convenient

Source: Author (2018)

g) Validity and Reliability of the Instrument

According to (Ochieng et al, 2007), for a study to be of real meaning it ought to apply valid and reliable instrument. We ensured that the research instruments checked for validity and predetermined its reliability.

h) Validity

The level of dependability of the questions in the research instrument or the degree to which a measurement instrument gives the same results each time that it is used, assuming that the underlying item being measured does not change is referred to as validity (Shuttle worth, 2015).

Validity determines whether the research truly measures what it is intended to measure or how truthful the research results are (Hamed, 2016). There are various types of validity but most commonly used are content validity and face validity. Content validity looks at whether the instrument adequately covers all the content that it should with respect to the variable. Face validity, is where experts are asked their opinion about whether an instrument measures the concept intended. To ensure validity in research, examination of trustworthiness is crucial. For us to establish the validity of the research instrument in this study, we were helped by research advisors and other experts. We were advised on retaining items based on their relevance, representation and clarity of wording. Thereafter, based on the feedback, we eliminated items that were unclear, irrelevant or redundant.

i) Reliability

Reliability refers to the level of dependability of the questions in the research instrument or the degree to which a measurement instrument gives the same results each time that it is used, assuming that the underlying item being measured does not change. Before administering the questionnaires, a pre-test was conducted in Nyarugenge and Muhima sectors, on the instrument whose validity was ensured. The aim was to pre-test the questionnaire with the view to ensure that respondents understood the questions so as to provide appropriate responses. In addition, it helped to check whether administration of the survey procedure as a whole went smoothly (Finn, 2015).

To certify that the instrument is reliable a Cronbach's Alpha coefficient of 0.6 and above must be achieved (Amin, 2005). Using SPSS, the calculated value of the instrument reliability was 0.862 Cronbach's Alpha. See table 6 below.

Table 6: Results of reliability test

Valid items	Sample size	Cronbach's Alpha
45	96	0.862

Source: researchers' data

j) Rigour, Validity and reliability

While establishing good quality studies through reliability and validity in research, trustworthiness of a research report lies at the heart of issues conventionally discussed. Rigour, which refers to the extent to which the researchers worked to enhance the quality of the studies, is achieved through measurement of the validity and reliability (Joppe, 2004).

k) Data Analysis

Raw data from the field was cleaned, coded and by using the SPSS software was entered in the computer. Descriptive statistics, in this case frequencies, percentages, mean and standard deviation scores as were derived.

Table 7: Evaluation and scoring of the questionnaire: Analysis of perception

Scale Point	Responses	Verbal description	Weighted mean
5	Strongly Agree (SA)	Very high perception	4.21 - 5.00
4	Agree (A)	High perception	3.51 – 4.50
3	Neither Agree nor Disagree (ND)	Fair perception	2.51 – 3.50
2	Disagree (DA)	Low perception	1.51 – 2.50
1	Strongly Disagree (SD)	Very low perception	1.0 – 1.50

A Likert scale with five points was used for the survey. This is because it allowed the respondents to measure how much they agreed or disagreed with a particular statement (McLeod et al, 2015).

There was need to establish or explain to what extent a change in one or several independent variable(s) could explain a change in the dependent variables. Table 8 below indicates the strength of the relationship was rated.

Table 8: Rating of Correlations

Strongly high	0.9 - 1.00
High	0.7 – 0.9
Moderate	0.5 – 0.7
Weak	0.3 – 0.5
Very weak	0 – 0.3

l) Limitations

First, eliciting information from respondents required patience and high degree of tact due to their evasiveness and fear wondering that the researcher may be among the authorities in charge of the District, who after gathering the information, would use it to exact taxes on them. A lot of time was required. Secondly, the informal sector is characterised by lack of or poor records.

X. Findings

This research intended to achieve the following objectives: identify the challenges faced by tax collectors in Nyarugenge District, show the challenges which prevent informal traders not to pay taxes and to analyze the relationship between informal trade and tax compliance.

a) Socio-Demographic characteristics of the respondents

The study findings of socio-demographic characteristics (Gender, Age, Education and Experience) are summarized in the following tables.

Table 9: Respondents Gender

Gender	Frequency	Percentage	Cumulative percentage
Male	32	33.3	33.3
Female	64	66.7	100
Total	96	100	

Source: Primary Data

Table 9 shows that the majority (64/96), thus 66.7% of the total respondents, were female and (32/96), thus 33.3% of the respondents were male. The researchers concluded that the informal sector was dominated by females. This also shows that in real life the more practicable informal trade was performed by women, therefore policy makers and other stakeholders must consider this when making decisions.

Table 10: Respondents education

Education	Frequency	Percent	Cumulative percent
Uneducated	49	51	51
Primary	47	49	100
Total	96		

Source: Primary Data

The revelation in table 10 is that the majority, that is 49 out of 96, thus 51% of the total respondents, were uneducated. Those who had attained primary level schooling were 47 out 96 thus 49%. This is a key guide to policymakers. Read together with the table on gender above, the implication is that the majority women are of very limited education, and the male are not any much better. This shows that the low level of education was the main factor contributing to the informality of conducting informal trade. Related to this is the evident failure to keep both financial and non-financial records, which is incompatible with taxation compliance. If participation in the informal sector is closely related to low levels of education, then policy in the education sector must be aligned to address this. Programs for tax education have to be rolled out cognizant of the challenge.

b) Challenges faced by tax collectors

In order to have accurate information, we prepared questions about the challenges faced by tax collectors from Nyarugenge District on informal trade and the table 11 below provides the field findings.

Table 11: Challenges faced by tax collectors

Statements	Frequency	Percent	Cumulative (%)
Lack of enough skills of tax collectors in the domain of finance	5.0	35.7	35.7
Poor perceptions on the relevance of tax payment	2.0	14.3	50.0
Taxpayers` culture to evade taxes	1.0	7.1	57.1
Social condemnation among taxpayers against tax offences	3.0	21.4	78.5
Business activity without trading license	1.0	7.1	85.6
Means of transport to facilitate taxpayers to reach the area of tax collection	2.0	14.4	100.0

Source: Primary Data 2015

Table 11 shows that 5 out of 14 (35.7%) of the tax collectors said that the challenge they face is lack of enough skills in the domain of finance. Those faced with the stigma of social condemnation among taxpayers who are against tax offences were 3 out of 14, that is, (21.4%) tax collectors. In third place, 2 out of the 14 tax collectors (14.4%) said that the challenge faced by tax collectors is means of transport to facilitate taxpayers to reach the area of tax collection. A similar percentage is challenged by poor perceptions on the relevance of tax payment. Finally, 1 out of 14 tax collectors (7.1%) out of 14 tax collectors said that the challenge they faced was taxpayers` culture to evade and avoid taxes and carrying on business activity without trading license. The findings reveal that some of the barriers to tax collection and compliance are institutional and can be administratively addressed by the Rwanda Revenue Authority (RRA). Rejection by society is a psycho-socio problem which must be addressed as such before symptoms reveal themselves by way of stress.

c) *Challenges faced by informal traders on tax payment*

We asked questions about the challenges faced by informal traders in an effort to pay tax in Nyarugenge District.

Table 12: Challenges faced by informal traders on tax payment

Statement	Minimum	Maximum	Mean	Standard deviation
Lack of education on tax payment and procedures	3.0	5.0	4.1771	0.69577
Failure to understand the relevance of paying tax	3.0	5.0	4.1771	0.69577
Higher tax rate imposed compared with business capacity	4.0	5.0	4.6667	0.47388
Low capital of investment	4.0	5.0	4.8438	0.36500

Source: Primary data 2015

Table 12 indicates a telling and qiute significant average mean score of about 4.2000 with reagrd to challenges faced by infromal traders on tax payment. This implies that the chalenges are really potent. At the top are the challenges of low capital investement, with a mean score of 4.8438 and lowest standard deviation of 0.36500. This is closley followed by hihger tax rate imposed compared with business capacity (most likely reflected by the low capitalisation) whose mean is 4.6667 and standard deviation is 0.47388. This means that respondents differ least on the challenge of low capital, and almost similary on high tax rates. Scoring lower but also significant figures are challenges of failure to understand the relevance of paying tax and lack of education on tax payment and procedures with a mean of 4.1771 and standard deviation of 0.69577. First of all, this is not surprising given that the level of education of the participants in the informal sector is barely basic, where it exists. This was revealed in section 10.1 on Socio-Demographic characteristics of the respondents.

The coincidence of standard deviations with the mean scores, that is, lack of education on tax payment and procedures and failure to understand the relevance of paying tax depicts a high degree of consistency in the findings and therefore reliability and validity of the findings. This is further confirmed by standard deviation of 0.47388 and 0.36500 for 4.6667 and 4.8438 scored for higher tax rate imposed compared with business capacity and low capital of investment respectively. It indicates a high level of research rigour as defined in section 9.10 on rigour, validity and reliability above.

d) Informal traders' opinion on tax payment

After appreciating the challenges faced by tax collectors, as well as those faced by informal traders on tax payment, we found it pertinent that we obtain information on the informal traders` opinions on tax payment. The findings are as in table 13 below.

Table 13: Informal traders' opinion on tax payment

Statement	Minim	Maximum	Mean	Standard deviation
Reduction of rates imposed on taxpayers` business	4.00	5.00	4.6667	.47388
Increasing the purchasing power of the population through poverty reduction program	4.0	5.00	4.8438	.36500
Facilitate informal trade to access the business capital	3.0	5.00	4.6667	.49275
Monitoring and placement of informal trade to the modern market	2.0	5.00	4.3438	.47745
Sensitizing the informal traders for behavior change	4.0	5.00	4.8333	.37463
Training of informal trade regarding tax payment	4.0	5.00	4.3438	.47745

Source: Primary data 2016

The results from the table 13 logically flow with the findings in table 12 which provides findings on challenges faced by informal traders on tax payment. It is therefore not surprising that top on the list is the demand for increase of the purchasing power of the population through poverty reduction programs. It has a mean score of 4.8438 out of 5.0 and a standard deviation of .3650, the highest and lowest in the table respectively. Coincidentally, at the top of the list in the table of challenges was low capital investement, with a mean score of 4.8438 and lowest standard deviation of 0.36500. Poverty reduction is impliedly most crucial as it enhances income, which in turn would increase savings and thereofre the capital in the potential and actual taxpayer's enterprises. In table 13 increase in poverty reduction is followed by sensitising the informal traders for behaviour change which scored a mean of 4.8333 a standard deviation of .37463. In table 11 on chalenges by tax collectors social condemnation among taxpayers against tax offences and poor perceptions on the relevance of tax payment ranked higher than most others, expect lack of enough skills of tax collectors in the domain of finance. In table 12 above lack of education on tax payment and procedures as well as failure to understand the relevance of paying tax scored a high average of 4.1771. It is therefore not surprising that sensitising the informal traders for behaviour is the next most important issue on informal traders' opinion on tax payment. Training of informal traders regarding tax payment and monitoring and placement of informal trade to the modern market follow with a score of 4.3438. Sensitizing and training are about creating awareness and therefore closely related. It is also important that when one objectively trains or sensitizes for a purpose or deliverables, the trainees are monitored to assess whether the training was effective and benefited the trainees. It is about impact assessment.

A population whose poverty is reduced and who have been sensitised and trained are expected to garduate to a higher level. The enhanced skills and management compentecees in turn imply business capacity that will requiure that in addition from internal sources, enterprises can leverage external sources to increase their funding. It is therefore logical that next to poverty alleviation programs, sensitisation and tarining, facilitation of informal trade to access the business capital, scoring a mean of 4.6667 is next. At the same level of score is reduction of rates imposed on taxpayers` business. This is so because with a wider tax base and well sensitized and better capitalized businesses, more revenue can be raised by a responsive community, with more taxable profits.

e) Relationship between informal trade and tax compliance

Correlation is a measure or degree of relationship between variables. Statistical correlation can be positive, negative or zero. In the table below we interrogate the relationship between informal trade and tax compliance in Nyarugenge District. The Spearman's correlation coefficient, r, can take values from +1 to -1. The higher the magnitude of the r, the higher the revealed relationship, whether negative or positive.

Table 14: Correlations Analysis

Correlation				Informal trade		Tax compliance
Spearman's rho	Informal trade	Correlation Coefficient		1.000		.660**
		Sig. (1-tailed)		.		.000
		N		96		96
	Tax compliance	Correlation Coefficient		.660**		1.000
		Sig. (1-tailed)		.000		.
		N		96		96

The findings presented in table 14 show that there is a slight positive relationship between tax compliance with informal trade at 0.666, sig .000. This implies that more has to be done to raise the relationship. On the good side, on their part the informal sector taxpayers are not totally oblivious of their statutory role of paying taxes. The government of Rwanda can do a close study elsewhere, especially in Africa to improve on tax compliance.

XI. Conclusions

The factors for tax compliance and non-compliance are two-way. Governments, including that of Rwanda, must promote an equitable legal and regulatory environment for the conduct of business in general, and as revealed in this study, for tax purposes. They must provide enabling tax education programs, set tax rates reasonably, be evidently seen to provide benefits for the taxes paid and have in place adequate and appropriate institutional mechanisms and systems that make appreciation of tax issues and payments convenient for the tax payer. The government has political and social contracts with the people governed, to provide social and other services, as well as the physical infrastructure like roads and utilities like water and power. On their part the governed have the reciprocal and statutory obligation to raise the funds, through among others, paying taxes, to enable government execute its duties and responsibilities under the social and political contracts. They have to pay taxes, which the government will have set, mindful of the canons and principles articulated above.

Respondents were cagey when they were asked about whether there may be inhibitive vices such as frequent payment to non-state actors, for instance criminal gangs or corrupt officials who offer protection to evaders, which reduces individual's likelihood to have tax compliant attitude. With the findings of study which revealed institutional challenges of, for example, lack of transport, there could be gaps which could allow the vices to creep in.

It is noted from the findings that on their part the informal sector taxpayers in Rwanda are not totally oblivious of their statutory obligations of paying taxes. However, government has to substantially enhance public awareness by way of tax education and accompany this with providing tangible benefits in return for the sacrifices the taxpayer makes.

XII. Recommendations

Tax compliance is only one aspect of the multifaceted and very important matter of the tax discipline. Further studies can for example be done with respect to the national budgetary processes and fiscal policies in Rwanda and other developing or emergent countries. These have an impact on compliance or otherwise, with taxation.

Nations are so closely interrelated in the globalised world that the impact of this phenomena can be a very interesting aspect of tax compliance. Study in this area would be value enhance.

References Références Referencias

1. Abdul Jabbar, H. & Pope, J. (2008). Exploring the relationship between tax compliance costs and compliance issues in Malaysia. Journal of Applied Law and Policy 1(1): 1-20:
2. Adam Smith (1776) An Inquiry into the Nature and Causes of the Wealth of Nations,
3. Adesoji, A. A., & Chike, F. O. (2016). The effect of internal revenue generation on infrastructural development. *Journal of Educational and Social Research, 3(2),* 419–428.
4. Ajay K. Mehrotra (2018) Fiscal Forearms: Taxation as the Lifeblood of the Modern Liberal State, American Bar Foundation Northwestern University Pritzker School of Lawakm@abfn.org
5. Ali, M., O. H Fjeldstad and I. H Sjursen I.H. (2013) Factors affecting tax compliance attitude in Africa: Evidence from Kenya, Tanzania, Uganda and South Africa, Chrva. Michelsen Institute, Bergen, Norway. Paper prepared for Centre for the Study of African Economies 2013 Conference on Economic Development in Africa. http://www.cmi.no/public cations/file/4727-factors-affecting-tax-compliant-attitude-in-africa.pdfMoreover

6. Ameyaw, B., Oppong, A., Abruquah, L.A., & Ashley, E. (2016). Informal sector tax compliance issues and the casualty nexus between taxation and economic growth. *Scientific Research Publishing,* 7(1), 1479–1485.
7. Amin, E (2005) Social Science Research, Makerere University Printery, Kampala, Uganda.
8. Andy McKay,1 Jukka Pirttilä,2 and Caroline Schimanski3 (2019) The tax elasticity of formal work in African Countries, WIDER Working Paper 2019/69
9. Anirudh Tagat (2019) The Taxman Cometh: Behavioural Approaches to Improving Tax Compliance in India, Journal of Behavioral Economics for Policy, Vol. 3, No. 1, 12-22, 2019:
10. Atawodi, O. W., Ojeka, S. A., (2012), *Factors That Affect Tax Compliance among Small and Medium Enterprises (SMEs) in North Central Nigeria*, International Journal of Business and ManagementVol.7,No.12, http://www.ccsenet.org/journal/index.php/ijbm/article/download/15251/12028 Ojochogwu
11. Bakkabulindi, F. E. K. (2004). Research methods by example. Makerere University printing press.
12. Camp, W. G. (2001). Formulating and Evaluating Theoretical Frameworks for Career and Technical Education Research. Journal of Vocational Educational Research, 26 (1), 27-39.
13. Casey, J., & Scholz, J. (1991). Beyond Deterrence: Behavioral Decision Theory and Tax Compliance. *Law & Society Review,25*(4), 821-843. doi:10.2307/3053871
14. Chowdhury Samia Tarannum (2015) Bangladeshi *Professionals' Tax-Paying Behavior in Convergence with the Principles of Taxation?* Research in World Economy Vol. 6, No. 3; ISSN 1923-3981 E-ISSN 1923-399X
15. Dekoya, A. Augustine1 Olaoye, A. Samuel2 Lawal, A. Babatunde3 (2020) Informal Sector and Tax Compliance in Nigeria- Challenges and Opportunities, International Journal of Emerging Trends in Social Sciences ISSN: 2521-3539 Vol. 8, No. 2, pp. 57-69, 2020 DOI: 10.20448/2001.82.57.69
16. Devos K. (2014) Tax Compliance Theory and the Literature. In: Factors Influencing Individual Taxpayer Compliance Behaviour. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-7476-6_2
17. Edame, G. E., & Okoi, W. W. (2014). The Impact of Taxation on Investment and Economic Development in Nigeria. Academic Journal of Interdisciplinary Studies. Vol. 3 (4): 209- 218. doi: https://doi.org/10.5901/ajis.2014.v3n4p209.
18. Federico Balbiano (2018) Tax Diversity and Tax Integration January 2018 SSRN Electronic Journal DOI: 10.2139/ssrn.3102998
19. Finn Bridgid(2015) Measuring Motivation in Low-Stakes Assessments, Research Report ETS RR–15-19.
20. Grant, C. & Osanloo, A. (2014). Understanding, Selecting, and Integrating a Theoretical Framework in Dissertation Research: Creating the Blueprint for 'House'. Administrative Issues Journal: Connecting Education, Practice and Research. 12-22 DOI: 10.5929/2014.4.2.9.
21. Guillermo, B., & Deyve, F. A. (2019). The informal economy and its impact on tax revenues and economic growth: The case of Peru, Latin American and OECD countries (1995–2016), *360 Revista Deciencias Delagestion*, *4*(4), 128–157. https://doi.org/10.18800/360gestion.201904.006
22. Hamed Taherdoost (2016) Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research, International Journal of Academic Research in Management (IJARM) Vol. 5, No. 3, 2016, Page: 28-36, ISSN: 2296-1747 c Helvetic Editions LTD, Switzerland www.elvedit.com
23. Hart, Keith (1973) "Informal Income Opportunities and Urban Employment in Ghana." *The Journal of Modern African Studies*. 11/1: pp. 61–89, 1973
24. Heang Boong Taing&Yongjin Chang (2020) : Determinants of Tax Compliance Intention: Focus on the Theory of Planned Behavior, International Journal of Public Administration https://doi.org/10.1080/01900692.2020.1728313
25. Herrera, J., M. Kuepie, C. Nordman, X. Oudin and F. Roubaud. (2012.) Informal Sector and Informal Employment: Overview of Data for 11 Cities in 10 Developing Countries. WIEGO Working Paper No. 9, Available at www.wiego.org.
26. Horodnic, I.A. (2018), "Tax morale and institutional theory: a systematic review", *International Journal of Sociology and Social Policy*, Vol. 38 No. 9/10, pp
27. International Labour Organization, Women and Men in the Informal Economy 2002.
28. INTERNATIONAL MONETARY FUND (2017) SUB-SAHARAN AFRICA RESTARTING THE GROWTH ENGINE WorldEconomic and Financial Surveys Regional Economic Outlook:
29. Clifton Fleming, J., Robert J. Peroni& Stephen E. Shay(2001) Fairness in International Taxation: The Ability-to-Pay Case for Taxing Worldwide Income FLORIDA TAX REVIEW VOLUME 5 2001 NUMBER 4
30. Rukundo Johnson Bosco (2015) Productivity and Informality in Rwanda: Evidence from the Food Processing Sector https://www.researchgate.net/publication/309211499
31. John L. Mikesell &Liucija Birskyte (2007) The Tax Compliance Puzzle: Evidence from Theory and Practice ,International Journal of Public Administration , Volume 30, 2007 - Issue 10: Public Financial Management: Setting the Disciplinary

Boundaries Pages 1045-1081 | Published online: 24 Jul 2007, https://doi.org/10.1080/01900690701221423.

32. Joshi Anuradha, Wilson Prichard and Christopher Heady (2013) Taxing the Informal Economy: Challenges, Possibilities and Remaining Questions, second edition reprinted as Institute of Development Studies Working Paper 429 in August 2013, ISSN: 1353-6141 ISBN: 978-1-78118-128-7
33. Joppe, M. (2004). The Research Process. *Retrieved February 25, 1998, "http://www.ryerson.ca/mjoppe/rp.htm*"
34. Kanbur, R., and M. Keen. 2014. "Thresholds, Informality, and Partitions of Compliance." International Tax Public Finance 21: 536 –59.
35. Keen, M. (2012). Tax and development – Again. In G. Zodrow & C. Fuest, Critical issues in taxation in developing countries (pp. 13–44). Cambridge, MA: MIT Press.
36. Kent W. Smith and Karyl A. Kinsey (1987) Understanding Taxpaying Behavior: A Conceptual Framework with Implications for Research Law & Society Review Vol. 21, No. 4 (1987), pp. 639-663
37. Kothari, C. R. (2004). Research Methodology, methods and techniques (2nd ed.). India, Jaipur: New Age International limited publishers
38. Lutfi Hassen Ali Al-Ttaffi∗& Hijattulah Abdul-Jabbar (2015) A CONCEPTUAL FRAMEWORK FOR TAX NON-COMPLIANCE STUDIES IN A MUSLIM COUNTRY: A PROPOSED FRAMEWORK FOR THE CASE OF YEMEN, 1IPBJ Vol. 7(2), 1-16 (2015)
39. Mcleod Alexander. Sonja Pippin, Jeffrey Wong (2011), Revisiting the Likert scale: can the fast form approach improve survey research? International Journal of Behavioural Accounting and Finance 2(3/4):310 – 327 DOI: 10.1504/IJBAF.2011.045019
40. Michael G. Allingham and Agnar Sandmo (1972) INCOME TAX EVASION: A THEORETICAL ANALYSIS Journal of Public Economics 1 (1972) 323-338. 0 North-Holland Publishing Company
41. Mitu, Narcis Eduard (2016) "Taxpayer behaviour: typologies and influence factors." *Revista de Stiinte Politice*, no. 49, 2016, p. 77+.:
42. Neill, J. (2000) The benefit and sacrifice principles of taxation: A synthesis. *Soc Choice Welfare*17, 117–124 (2000). https://doi.org/10.1007/PL000071690
43. Ngerebo-a T.A.(2010) THE PRINCIPLE OF MAXIMUM ADVANTAGE AND THE SIZE OF PUBLIC BUDGET IN NIGERIA PRESENTED BY T. A. NGEREBO, https://www.researchgate.net/publication/280308496_
44. Nkundabanyanga, S.K., Mvura, P., Nyamuyonjo, D., Opiso, J. and Nakabuye, Z. (2017), "Tax compliance in a developing country: Understanding taxpayers' compliance decision by their perceptions", *Journal of Economic Studies*, Vol. 44 No. 6, pp. 931-957. https://doi.org/10.1108/JES-03-2016-0061.
45. NISR. (2014) Rwanda Poverty Profile report, Integrated Household Living Conditions Survey (EICV4) Kigali.
46. Obara, L. C., & Nangih, E. (2017). Taxing the informal sector and revenue generation in developing countries: An empirical investigation from the Rivers state of Nigeria. *Journal of Accounting and Financial Management, 3*(1), 48–50.
47. O.G. Ochieng, T. Hinako, A. Motohiro, K.P Masako, and N. Keiko, Journal of Advanced Nursing 60, 209-219 (2007). 070001-5
48. Oduwole, J., & Sanni, A. (2014). Policy brief on expanding the tax base in the informal sector in Nigeria. *A Publication of Civil Society Legislative advocacy,* 1–22.
49. Olsen, J., Kang, M., & Kirchler, E. (2018). *Tax psychology.* In A. Lewis (Ed.), *Cambridge handbooks in psychology. The Cambridge handbook of psychology and economic behaviour* (p. 405–429). Cambridge University Press. https://doi.org/10.1017/9781316676349.014: behavioural finance,
50. Peter J. Lambert& Helen Naughton (2009) The equal absolute sacrifice principle revisited , Journal of Economic Surveys 23(2):328-349, DOI: 10.1111/j.1467-6419.2008.00564.x
51. Philippe Aghion Ufuk Akcigit Matthieu Lequien Stefanie Stantcheva (2017) Tax Simplicity and Heterogeneous Learning∗. Scholarhavard edu>files>aghion>files>taxsimplif
52. Pimhidazai, O. and Fox, L. (2012) *Taking from the poor or local economic development: the dilemma of taxation of small informal enterprises in Uganda.* World Bank discussion paper.
53. Sandford C, Godwin M and Hardwick P (1989) Administrative and compliance costs of taxation (Fiscal Publication, Bath: UK, 1989) at 10
54. Polit, D.F., Hungler, B.P. (1999) Nursing Research: Principles and Methods6th ed. Philadelphia: J.B. Lippincott
55. Schneider, F., Buehn, A., & Montenegro, C. (2010). Shadow economies all over the world: New estimates for 162 countries from1999 to 2007. World Bank Policy Research Working Paper No. 5356. Washington, DC: The World Bank.
56. Saez, E., Slemrod, J., & Giertz, S. (2012). The Elasticity of Taxable Income with Respect to Marginal Tax Rates: A Critical Review. *Journal of Economic Literature, 50*(1), 3-50. Retrieved September 15, 2020, from http://www.jstor.org/stable/23269968
57. Sekaran, U. (2003) Research Methods for Business: A Skill-Building Approach. 4th Edition, John Wiley & Sons, New York.

58. Serdar ÇİÇEK & Hüseyin Güçlü ÇİÇEK & Elif Ayşe ŞAHİN-İPEK, (2019) "Behavioral Approach to Tax Compliance Process: Taxpayer Behaviors and Typologies," Sosyoekonomi Journal, Sosyoekonomi Society, issue 27(39)
59. Sellywati Mohd Faizal, Mohd Rizal Palil, Ruhanita Maelah, Rosiati Ramli (2017): Perception on justice, trust and tax compliance behavior in Malaysia, Kasetsart Journal of Social Sciences, Volume 38, Issue 3, September–December 2017, Pages 226-232:
60. Shuttleworth M (2015) Internal Consistency Reliability. https://explorable.com/internal-consis tency- reliability.
61. Taxation Handbook (2015) Guide to Taxation in Uganda, A Publication of Uganda Revenue Authority
62. Thomas, J (2002) Decent Work in the Informal Sector: Latin America, London School of Economics, ILO, 2002
63. Tuan Minh Le (2016) Measuring Efficiency and Productivity of Taxation: A Review of Tax System in Mozambique, Case Studies in Business and Management ISSN 2333-3324 2016, Vol. 3, No.2 1
64. Wilson Prichard, Anna Custers, Roel Dom, Stephen Davenport, Michael Roscitt (2019) Innovations in Tax Compliance: Conceptual Framework https://doi.org/10.1596/1813-9450-9032
65. World Bank Group (2017) FROM REGULATORS TO ENABLERS THE ROLE OF CITY GOVERNMENTS IN ECONOMIC DEVELOPMENT OF GREATER KAMPALA, (www.worldbank.org/uganda).