

DRIVERS OF TAX COMPLIANCE AMONG SELF-EMPLOYED IN GHANA

Simon Akumbo Eugene Mbilla,
John Gartchie Gatsi,
Emmanuel Yaw Arhin
Redruth Nyaaba Ayimpoya.

ABSTRACT

Tax revenues are important to government, thus tax authorities ensure tax compliance to provide sufficient revenue for government. This paper therefore investigated the extent to which institutional factors, economic factors, individual factors and social factors drives tax compliance among self-employed in Northern Ghana. The paper used a quantitative survey design, convenience sampling technique & questionnaire as primary data collection instrument. A total of 361 self-employed were engaged from three Northern regions (Upper East, Upper West and Northern region) in Ghana for the study. Structural Equation Modeling was used to analyze four main hypotheses of the study. The study result therefore showed a positive significant influence of economic drivers, individual drivers & social drivers on tax compliance behaviour. While the paper found no significant influence of institutional drivers on tax compliance, social drivers were found to strongly influence tax compliance behaviour. The paper concludes that, social drivers strongly influence tax compliance behaviour among self-employed. The paper contributes to practice & policy by revealing that tax compliance behaviour in Northern Ghana particularly rural communities has assumed a social dimension. Government must therefore include and encourage religious heads, opinion leaders and social groups to use social events to educate members by shaping their attitudes, perceptions and orientation towards tax compliance. Future study may extent these compliance drivers in Southern Ghana, and comparative study to expand understanding and make informed tax decisions.

Key Words: Tax, Tax compliance, Self-employed, Northern Ghana

1.0 Background

In the 21st century, governments across the globe have changed their revenue collection strategy with the aim of improving revenue collection. The changes in revenue collection strategies have been occasioned by the high demand on governments to improve socio-economic commitments to her citizenry. In view of the high demand, one central source of revenue that has and continues to receive consideration and re-strategizing is taxes. The issue of taxation has become an old-age source of revenue for governments across the world. Tax represents a compulsory, unrequited payment to central government (Organization for Economic Co-operation and Development 2012). Tax presents a compulsory levy that by law, government imposes on the citizens or non-citizens residents in/of nation in order to raise revenue to finance government fiscal obligations. In many developed and developing nations, the system of taxation has reposed inherent power into the state government to impose and demand contributions upon persons, properties, or rights for the purpose of generating revenue for public purposes (Yin *et al.*, 2016).

In developing nations, because of the low revenue sources from exports and other non-tax revenue streams, direct and indirect taxation has become a significant source of revenue for central governments. Despite the significant contribution of tax revenue to socio-economic livelihood of the people, many developing countries such as Ghana is unable to generate the needed tax revenue for national development (Adamopoulos, 2010; Fuest & Riedel, 2009) hence, the issues of tax compliance comes into question.

Furthermore, tax compliance has remained an economic scourge for every government. Defined by the Income Tax Act, 2015 Act (896) of Ghana, tax compliance is the ability and willingness of taxpayers to comply with tax laws and regulations, declare the correct income or revenue periodically and pay the right amount of taxes on time (Ming *et al.*, 2005). Tax compliance depict a high level of responsiveness of taxpayers in obligating and meeting tax obligation voluntarily or when called upon to do so by tax authorities (Yin *et al.*, 2016). A critical look at the concept of tax compliance indicates that, compliance is a voluntary act for all individuals and businesses.

One critical and relevant group of tax contributors that are often neglected in the revenue collection stream is the “self-employed” business owners. Self-employed are individual business, normally operate in the informal economy who are working for themselves. Camel (2000) defines self-employed to mean “people who work for themselves, and they may or may not engage other peoples’ services or members of their families to help run the business without a defined mode of payment”. The nature and size of self-employed businesses means that they operate in relatively small professional organizations. Self-employed do not normally register with appropriate tax and legal authorities, hence the potential to evade taxes and other statutory obligations. Over the years studies have investigated factors driving tax compliance. These studies have result in several factors driving tax compliance among large firms and income workers (Kirchler, *et al.*, 2008; Williams, 2001). There is therefore limited understanding regarding the drivers of tax compliance among self-employed who are normally found outside the formal economy. Empirical findings from previous studies are mixed, unclear and scatted, thus limiting understanding on specific factors driving tax compliance among self-employed Kung (2016); Naporow 2015; Ohene (2014); Opong (2015); Razak & Dan Adafula (2013); (Alm, Jackson, & Mckee 1992; Fischer *et al.*, 1992; Kucera, 2002; Mohani, 2003; Trivedi *et al.*, 2005; Torgler

& Valev, 2007; Singh, 2003). Against this backdrop, this study sought to extend the study by investigating specific factors driving tax compliance behaviour among self-employed.

2.0 Concept of taxation

Taxation represents the inherent power of a state government to impose and demand monetary contributions from the public for the purpose of public good (Yin *et al.*, 2016). James and Nobes (1997) also define tax as a compulsory levy from the people of a country to the government for which nothing is received directly in return. Stated differently, taxation is a compulsory levy imposed on the citizens of a nation by an authority so as to raise financial resources to finance the Government's expenditure over a given fiscal year. Taxation has therefore being identified as the livewire of every country, without which the wheels of progress will stagnate. In collecting taxes, government can use direct or indirect approach, either progressively, proportional or regressive (Venter *et al.*, 2004).

Moving a nation with scarce financial resources is similar to the use of a car with less or no oil. Thus, taxes are the lifeblood of any economy (Otchere-Ankrah *et al.*, 2014). Although a number of reasons have been adduced for taxation, the overriding objective of taxation is to generate revenue from citizens and economically active residents so as to finance government expenditures. In a general view, the benefits of taxation are not necessarily felt by the individual tax payer directly, the tax payer is under law to be responsible towards the financing of the state by contributing proportionately from the revenue he/she earns periodically. Without the required revenue generation through taxes, no government can accomplish anything important in terms of development such as schools, hospitals, roads, housing, water, sanitation and electricity. The current condition in most developed and developing nation has been an over concentration on the formal economy where only 20 percent of working population are identified and taxed (Agyei, 2004) leaving the self-employed who form the chunk of the working class untaxed (Naporow, 2015).

In light of this, a new paradigm of taxation is essential for government to ensure that every possible effort is made to ensure that every one including self-business owners is taxed through the appropriate tax procedures (Naporow, 2015). Stated differently, a country loses huge sum of revenue if the right actions are not taken to tax all active economic agents including self-employed particularly in the informal economy (Schneider & Enste, 2003). It is therefore important to investigate and understand the dynamism of tax compliance from developing country perspective where self-employed forms an average of 70 percent of business in Sub-saharan Africa (Adom & Williams, 2012).

2.1 Tax Compliance

Tax compliance has been largely explained by scholars from various field including management, economic and commerce, academics, professionals, and government agencies. In pure administrative terms, tax Compliance includes registering or informing tax authorities of one's status as a taxpayer, submitting a tax return every year (if required) and following the required payment time frames (Ming *et al.*, 2005). According to Alm (1992) tax compliance is an voluntary act of reporting all incomes and paying all taxes by fulfilling the provisions of tax laws, regulations and court judgments. Singh (2003) added that tax compliance is a person's act of filing Income Tax Forms, declaring all taxable income accurately, and paying off all tax liabilities promptly without having to wait for follow-up actions from the tax authority.

From regulatory policy perspective, Income Tax Act, 2015 Act (896) of Ghana defined tax compliance as the ability and willingness of taxpayers to comply with tax laws, declare the correct income in each year and pay the right amount of taxes on time. The regulation includes registering or informing tax authorities of status as a tax payer, submitting a tax return every year (if required), and following the required payment time frames (Ming *et al.*, 2005).

Quite profoundly, the central aim of an effective tax administration system is to encourage voluntary compliance to tax, Put differently, income tax non-compliance encapsulates failure to submit tax returns when legally obliged to do so, understatement of income tax returns, overstatement of deductions on tax returns, and failure to pay assessed taxes by the due date (Abdallah, 2006).

By nature, self-employed can hardly be said to comply with the basic tax compliance tenant as stipulated, partly explained by the nature of their business (Thuronyi, 2013). According to Fairlie (2005) self-employed persons are those individuals who identify themselves as working for themselves in business, professional practice or farming. Camel (2000) defined self-employed to mean "people who work for themselves, they may not engage outside services but utilize members of their families to help run the business without a defined mode of payment". However, as indicated by Thuronyi (2013), there is low tax morale on the part of the self-employed to voluntarily comply with tax legislations amongst taxpayers, especially in Ghana. For the purpose of this study, tax compliance is considered as the responsiveness of taxpayers in meeting their tax obligation voluntarily or when called upon to do so by tax authorities (Yin *et al.*, 2016).

2.1.1 Drivers of Tax Compliance

Various researchers have listed multiple factors driving tax compliance such as demographic, income, compliance cost, tax agents, moral or ethical considerations (Singh, 2003). Kung (2016) further identified four main factors driving tax compliance behaviour which include: economic factors and non-economic factors including institutional factors and psychological factors. Kirchler (2007) and Loo (2006) explained that determinant of tax compliance particularly among small businesses are classified in four categories including: economic factors, institutional factors, social factors and individual factors.

2.1.1.1 Institutional drivers

Effective taxation system vis-a viz tax compliance require a comprehensive responsibility of tax authorities to reduce the tax gap and increase voluntary compliance. According to Kirchler (2007) and Loo (2006) various institutional factors drive tax compliance behaviour among tax payers. Kirchler (2007) and Loo (2006) identified these institutional drivers to include the role of tax authorities, simplicity of the tax returns, administration and probability of detection. Consequently, a number of researchers have begun to question the value of sanctions as a singular driver of tax compliance behaviour. Contemporary studies have therefore shifted attention to emphasise the importance of voluntarism, persuasion and cooperation, known as accommodative approach as a regulatory tool for encouraging people to comply with tax obligation. State tax authorities supporting the accommodative regulatory enforcement tend to view individuals not as rational actors, but social actors who are inclined to comply with laws, partly because they believe in the rule of law, and partly as a matter of long-term self-interest (Naporow, 2015). Regulatory authorities adopting the accommodative model are more oriented toward seeking results through voluntary systems and cooperation rather than by coercion. Simplifying tax returns and administration potentially could help taxpayers to complete their tax returns accurately, thus improving tax compliance (Richardson, 2008).

2.1.1.2 Economic drivers

Economic drivers of tax compliance explain the essential role emanating from the state government in ensuring tax compliance among the citizens. According to Kirchler (2007) and Loo (2006) essential economic drivers of tax compliance include: tax rates, tax audits and perceptions of government spending. In furtherance to the inroads in explaining tax compliance among self-employed, Hasseldine & Li (1999) was of the view that, government and the tax authority are the main parties in the tax system, thus these institutions must design an efficient and effective enforcement and collection mechanisms to minimize tax evasion. Other studies have found some essential economic compliance drivers as taxation laws and systems (Keen, 2014), compliance cost (Laffer, 2014), tax laws, audits, detection possibility (Benk *et al.*, 2012). Extent studies have further suggested that excessive tax penalties and fines result in more tax avoidance (Kirchler *et al.*, 2008). In effect, Alm *et al.*, (1992) support the evidence that fines do affect tax compliance though the impact was virtually zero. Further studies have found that increasing tax rates is likely to encourage people to evade taxes (Ali *et al.*, 2001; Torgler & Valev, 2007) while lowering tax rates does not necessarily increase tax compliance (Trivedi *et al.*, 2004; Kirchler, 2007). Inconclusively, Allingham & Sandmo (1972) concluded that taxpayers may choose either to fully report income or report less, regardless of tax rate. Dean *et al.* (1980) agreed that financial hardship, government wastage, low chance of detection and the desire to break through the system as the factors that breed tax evasion in the informal economy.

2.1.1.3 Individual drivers

Evidence has begun to emerge that suggest that attitudes and ethics of the taxpayers play an important role in their tax compliance decisions (Eriksen & Fallan, 1996). Categorically, Kirchler (2007) and Loo (2006) explained that individual drivers of tax compliance are essential which includes personal financial constraints, awareness of offences and of penalties. In furtherance to that, Chan *et al.* (2000) reported that Hong Kong taxpayers have less favorable attitude towards tax system resulting in lower compliance. Other studies have found essential individual drivers such as fear of penalties for non-compliance (Martinez-vazquez & Moreno-Dodson, 2012) as drivers of tax compliance. Again, ensuring effective tax compliance also requires that a taxpayer improve the internal business operation systems. For instance, Richardson & Sawyer (2001) suggested that good records keeping leads to more accurate reporting of income and expenses in business tax returns. Record keeping therefore becomes an essential element that helps business to meet their tax obligations. From a another perspective, where a business keeps good records, it is quite likely that when these records are taken to the tax agency at the end of the year, the tax agency will have all the information needed to accurately complete the tax return. If good records are not kept, there are numerous adverse consequences for the individual taxpayer by preparing inaccurate tax returns, waste of time and other resources used in creating accurate financial records (Naporow, 2015).

2.1.1.4 Social drivers

Undoubtedly, tax authorities are constraints in terms of logistics for filed inspection, audit and check tax evaders. Alternatively, extent studies have found various social drivers influencing tax compliance among taxpayers. Kirchler (2007) and Loo (2006) explained that social factors such as referent groups and associations, opinions of social leaders, ethics and attitude of the tax payer, perceptions of equity and fairness, and political affiliation drives compliance behaviour. These compliance drivers are important to enhance voluntary tax compliance among taxpayers. Further studies have identified other social drivers such as subjective norms and cultural differences (Benk *et al.*, 2012) morality and ethical values of the tax payer and collectors, tax system equity (Murphy, 2004). As observed by Braithwaite (2003), building strategic relationships to help shape tax agents' understanding of taxpayer motivations will improve the skills of the tax officials and enable them respond to different needs of different taxpayers and gain support for strategies that address particular industry issues and practices. Taxpayer compliance cannot be achieved coercively, but rather cooperatively through dialogue and understanding (Aryes & Braitewaite, 1992).

3.0 Drivers of Tax Compliance and Tax Compliance Behaviour

Studies have found a significant effect of tax compliance drivers and compliance behaviour (Ameyaw *et al.*, 2016; Yin *et al.*, 2016; Kuug 2016) among informal operators in Ghana. Other empirical studies such as Oppong (2015) focused on Kumasi Metropolis; Razak & dan Adafula (2013) and Naporow (2015) focused on Tamale Metropolis; and Otabil (2015) focused on Komenda-Edina-Eguafo-Abrem Municipality. These studies found empirical support that socio-economic, individual and institutional factors drive tax compliance behaviour. Ameyaw *et al.* (2016) further investigated the determinants of tax compliance among firms in the informal sector. Using 600 respondents comprising informal sector taxpayers in all the ten regions in Ghana, the study found that attitudes, subjective norm and perceived behavioural control were the main determinants of the informal sector compliance issues. On the contrary, Oppong (2015) found that most respondents were of the view that the government does not provide enough information about how their taxes are used and therefore fell reluctant to pay their taxes such as VIT.

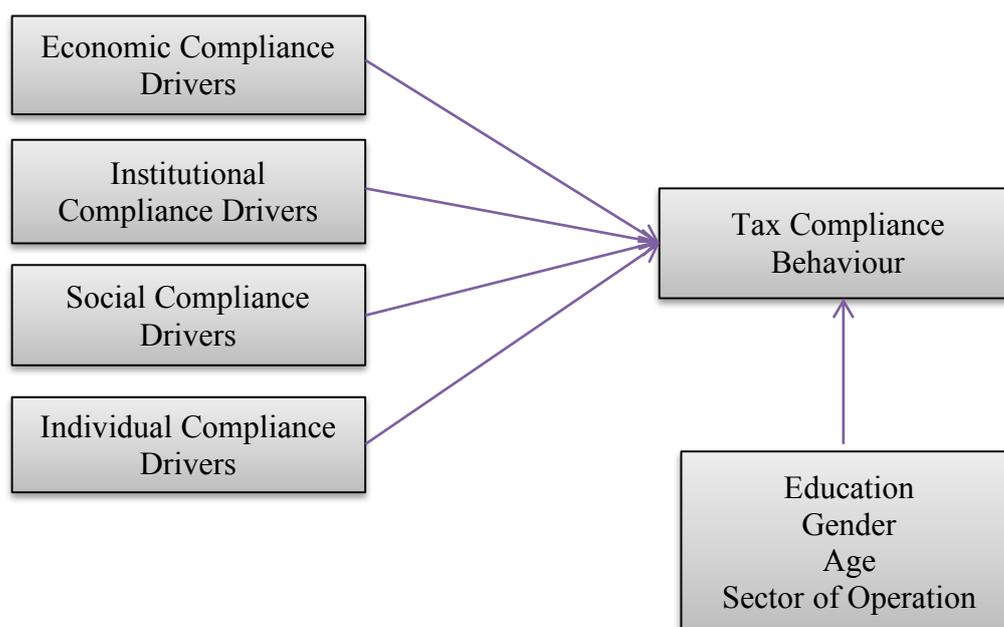
4.0 Fiscal Psychological Model

According to Cuccia (1994), taxpayer compliance has been primarily viewed from three theoretical perspectives: the general deterrence theory, economic deterrence models and fiscal psychology. The fiscal psychological model is adopted for this study to understand the relationship between drivers of tax compliance and tax compliance behaviour. The fiscal psychological model draws on both the economic deterrence model and the social psychological models. The Fiscal Psychology Theory stipulates that tax enforcement is a behavioural problem, thus people will comply with tax obligation through understanding and cooperation between government (tax collector) and tax payer. The central tenant within the model explains that the willingness of taxpayers to pay their taxes is likely to be low if they do not clearly see the real benefits of their tax payment. Thus if the government uses the taxes collected, judiciously to provide benefits for the taxpayers, then taxpayers will also reciprocate by paying their taxes without any thought of evasion. However where the government is perceived as being corrupt and misuse tax revenue, then taxpayers will be unwilling to pay their tax because they believe that it will not be used for their benefit (Hasseldine & danBebbington, 1991).

5.0 Conceptual Framework

Following the recommendation of Kirchler (2007) and Loo (2006) who identified four drivers of tax compliance, this paper conceptualize compliance factors as independent variables which includes: *institutional factors* (the role of the tax authority, simplicity of the tax returns and administration and probability of detection); *economic factors* (tax rates, tax audits and perceptions of government spending); *individual factors* (personal financial constraints, awareness of offences and of penalties) and *social factors* (ethics and attitude, perceptions of equity and fairness, political affiliation and changes on current government policy, referent groups). Tax compliance behaviour represents the dependent variable for the study. Figure I present the conceptual framework for the study with four control variables (gender, age, level of education and sector of operation)

Figure I: Conceptual Framework for Tax Compliance drivers and Tax Compliance Behaviors



6.0 Study Methods

The study adopted positivism since this paradigm allows the collection of large sample and the testing of hypothesis and it is based on unbiased and tangible reality. This study, however, employed a quantitative research method, which basically supports the positivist claims for developing knowledge (i.e. cause and effect relationship, questions and hypothesis testing and use of theories) through a research design such as experiments and surveys, data collection and analysis (Cooper & Schindler, 2011; Creswell, 2014). The study populations were self-employed in service sector, manufacturing, agriculture and agriculture related sector. Respondents were engaged from three Northern region of Ghana (Upper East, Upper West and Northern). The sample size for this research which is 361 respondents which is desirable since it is consistent with Tabachnick & Fidell (2007). The sample size was informed by Hair et al., (2010) who posits that for a sample to be representative, it should be preferably more than one hundred (100).

Since the study was a quantitative one, the researcher employed the use of IBM Statistical Package for Social Science (SPSS) version 20 and undertook structural equation modelling with AMOS version 21 which has been widely advocated for analysing data (Herrmann, Henneberg & Landwehr, 2010). The paper used descriptive statistics, undertook exploratory factor analysis and confirmatory factor analysis to achieve study objective. The paper adopted Cronbach alpha (CA) and Composite Reliability (CR) to ensure the reliability of the Structural Equation Modeling results (Hair et al., 2014; Hair et al., 2015). Validity was also

measured using convergent validity and discriminant validity (Rezaei, 2015; Rezaei & Ghodsi, 2014). Discriminant validity used construct correlations and cross-loading criterion while convergent validity employed Average Variance Extracted (AVE) and factor loadings (Rezaei, 2015).

7.0 Study Result and Discussion

The analyzed results are presented in three main themes: descriptive analyses, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA).

Descriptive Statistics

Pallant (2011) stipulated that, statistical analysis is the fundamental analysis that must be undertaken before data is further subjected to further validation analysis. Descriptive statistics provide a measurement of central tendency.

Table I: Descriptive Statistics of Respondents

Profile of Respondents	Statement	Freq.	%
Gender	Male	183	50.7
	Female	178	49.3
Age	18-27	121	33.5
	28-37	194	53.7
	38-47	38	10.5
	48-57	3	1.4
	58 and +	5	0.8
Educational Level	Senior High Sch.	22	6.1
	Junior High Sch.	27	7.5
	Primary	254	70.4
	Informal	58	16.1
Sector Of Operation	Agric-Agric related	188	52.1
	Manufacturing	63	17.5
	Services	110	30.5

From Table I, out of 361 self-employed engaged in the study 183(50.7%) are males while 178(49.3%) are females. Majority of 194(53.7%) respondent's ages ranged between 28-37 years while minimum of 3(1.4%) respondents ages ranged between 48-57 years. In terms of educational level, majority of 188(52.1%) respondents have attained primary education while a minimum of 22(6.1%) of the respondents have attained senior high school as the highest educational qualification. The researcher asked respondents to indicate which of the sectors of the Ghanaian economy they operate. The paper found that out of 361 respondents, 188(52.1%) respondents operate in the agriculture and Agric-related sector, 110(30.5%) in services sector while 63(17.5%) operate in the manufacturing sector. This result implies that majority of self-employed who were engaged in the study were females, between the ages of 28-47 years, have attained a primary education and predominantly operate in Agric-agric related businesses

Table II: Descriptive Statistics: Item Code, Mean, Std. Dev., Skewness and Kurtosis
Table II: Descriptive Statistics

Measurements Items	Item Code	Mean	Std. Dev	Skewness	Kurtosis
I file and pay my tax return because tax authorities makes it voluntary for me to file	Inst_Factor1	3.42	1.155	-.422	-.506
My tax returns is always filed because it is simple for me to file the tax returns	Inst_Factor2	3.38	1.122	-.456	-.500
The administrative system is simple for me file my tax returns at the tax office	Inst_Factor3	3.30	1.132	-.215	-.729
I file my tax return because is it easy for tax authorities to detect defaulters	Inst_Factor5	3.22	1.089	-.247	-.546
I file my tax returns because there is no complication and hidden information in the process of filling my tax return	Inst_Factor6	3.22	1.175	-.268	-.766

I comply with my tax obligations because the tax rates is “ok” for me to pay	Eco_Factor1	3.99	.956	-1.104	1.148
I complete and file my tax return regularly because tax auditors visit me to check my tax returns	Eco_Factor2	4.01	.837	-.994	1.386
I comply with my tax obligations because government spend the tax revenue judiciously	Eco_Factor3	3.91	.868	-.904	1.127
I file my tax returns because I receive benefits from government	Eco_Factor4	3.64	.944	-.546	-.124
Tax rate is transparent so I always file my tax returns to tax authorities	Eco_Factor5	3.55	1.056	-.627	-.104
I file and pay my tax because I run my finances well so that I can pay	Indv_Factor1	3.49	1.020	-.520	-.196
I am aware of the offences so I always comply with my tax obligation	Indv_Factor2	3.17	1.108	-.054	-.765
Defaulting tax obligation has severe penalties so I always comply with my tax obligation	Indv_Factor3	3.59	.954	-.599	.171
I do not want my business to suffer from legal battles so I always file my tax return	Indv_Factor4	3.64	.936	-.657	.163
As a business owner I feel that filing my tax return will help my business image	Indv_Factor5	3.50	1.006	-.474	-.220
I file my tax returns because it is ethical to file my tax returns regularly	Soc_Factor1	3.38	1.094	-.406	-.448
I file my tax return because it is equitable and fair to contribute my quota to national development	Soc_Factor2	3.09	1.112	-.091	-.766
Changes on current government policy allows me to file my tax returns easily	Soc_Factor3	3.01	1.106	-.085	-.739
It is my attitude as a business person to file my tax returns	Soc_Factor4	3.27	1.066	-.290	-.462
As part of a business group it is my obligation to always file my tax return	Soc_Factor5	3.21	1.082	-.103	-.589
Because of simple filling process I do not have any intention to evade filling and paying taxes	TaxComBeh1	3.51	1.069	-.580	-.120
Government uses my taxes for my good so I do not intent to reduce my official tax amount	TaxComBeh2	3.49	1.023	-.385	-.394
As an ethical business person I will feel bad if I don't file my tax return regularly at the tax office	TaxComBeh3	3.43	.993	-.219	-.352
The tax rate is “ok” for me so I do not intend to hide any information in my tax returns	TaxComBeh4	3.21	1.072	-.360	-.546
The tax is fair and equitable so I am willing to file my tax returns	TaxComBeh5	3.12	1.108	.016	-.666
Valid N (listwise)			360		

From Table II, the highest Mean value recorded is 4.01 and SD= .837 (I complete and file my tax return regularly because tax auditors visit me to check my tax returns) while the lowest Mean value recoded is 3.01 and SD=1.106 (Changes on current government policy allows me to file my tax returns easily). The highest Mean value indicate that regular visitation and check on self-employed drives them to comply with tax obligation while changes in government tax policies does not strongly drives self-employed to comply with tax obligation.

Table II further revealed that dependent and independent variables follows a normal distribution: the skewness and kurtosis values were within the acceptable limit for normal distribution of ± 2 (George & Mallery 2011) indicating that the data are close to normal. This form of data assessment was relevant and consistent with Baumgartner and Homburg (1996) who asserted that these processes ensure that the data is error free and suitable for analysis purposes.

The 25 variables displayed in Table II represent the components of the 5 main constructs depicted in the conceptual framework for the study. Institutional drivers, economic drivers, institutional drivers and social drivers of tax compliance represent (Independent variables). Tax Compliance behaviour also represent the independent variable while gender, age, educational qualification and sector of operation represent control variables.

Exploratory and Confirmatory Factor Analysis

Principal Component Analysis (PCA) was undertaken with Eigen values greater than 1. A Varimax Rotation was conducted and small co-efficient were suppressed. The absolute value was set at 0.5. The PCA was conducted based on the responses of the 25 items on the likert scale with the aid of SPSS version 20. In addition, Kaiser (1970) asserted that the suitable value for the Kaiser-Meyer-Olkin (KMO) should be 0.6 or above. The value for the KMO was .858. Bartlett's Test of Sphericity (Bartlett 1954) reached statistical significance (Approx.: Chi-square= 3782, df. 300, sig. 0.000) which aided the correlation matrix to be factorised.

Table III: Robustness Test Results

Principal Component Loadings		Internal Consistencies			Construct Reliability (CR)	Average Variance Extracted (AVE)
Items	Variables	Varimax	Variance Explained	Cronbach's Alphas(α)		
Factor 1	Inst_Factor1	.800	70.610	0.895	0.902	0.649
	Inst_Factor2	.836				
	Inst_Factor3	.838				
	Inst_Factor4	.828				
	Inst_Factor5	.785				
Factor 2	Eco_Factor1	.698	56.654	0.803	0.768	0.527
	Eco_Factor2	.780				
	Eco_Factor3	.798				
	Eco_Factor4	.709				
	Eco_Factor5	.637				
Factor 3	Indv_Factor1	.715	51.095	0.759	0.709	0.55
	Indv_Factor2	.708				
	Indv_Factor3	.640				
	Indv_Factor4	.599				
	Indv_Factor5	.658				
Factor 4	Soc_Factor1	.647	58.755	0.823	0.733	0.581
	Soc_Factor2	.781				
	Soc_Factor3	.713				
	Soc_Factor4	.762				
	Soc_Factor5	.808				
Factor 5	TaxComBeh1	.707	54.367	0.785	0.544	0.77
	TaxComBeh2	.769				
	TaxComBeh3	.800				
	TaxComBeh4	.682				
	TaxComBeh5	.610				

From Table III, all the 25 items for both dependent and independent variables loaded very well above a threshold set at 0.5. Internal consistencies were examined through the use of Cronbach Alpha. The measurement items met the threshold for Cronbach alpha of 7.0 (Cronbach 1951). The reliability measures in this study are above the acceptable satisfactory levels (Cronbach's alphas > .70, Average Variance Extracted > .50, composite reliability > .70) and correlation matrix >.30 as recommended by scholars (Fornell & Larcker, 1981). At the end of the robustness test, ten (10) measurement items were dropped in order to address the validity concerns of the data and also to achieve a model fit for the data.

Structural Model: Testing Independent and Dependent Relationship

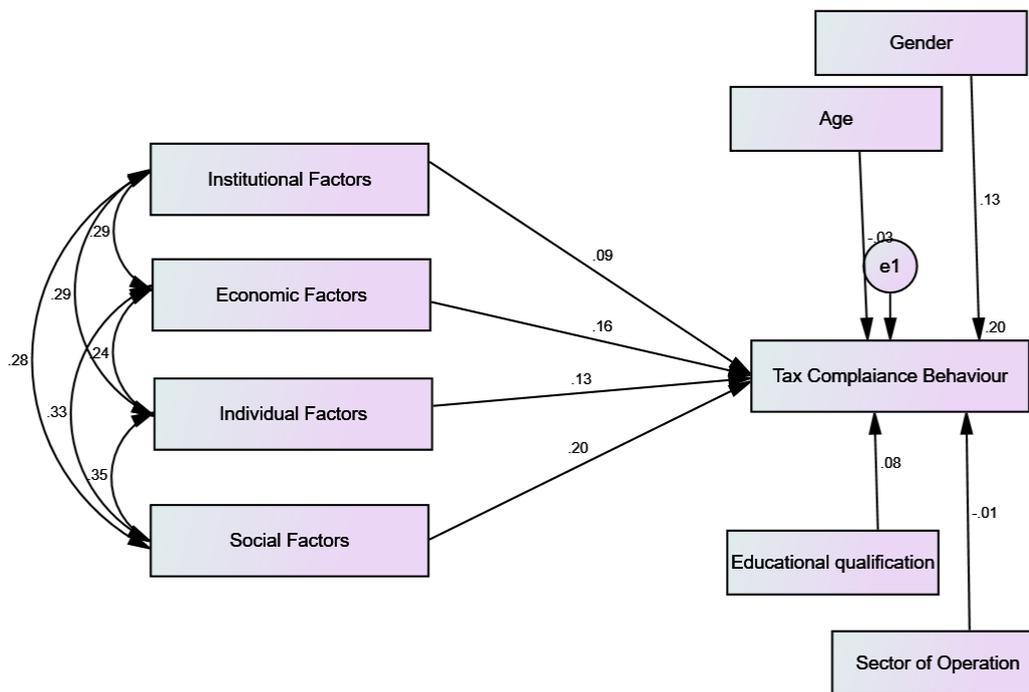
H1: *there is direct positive influence of Institutional factors on tax compliance behavior*

H2: *there is direct positive influence of Economic factors on tax compliance behavior*

H3: *there is direct positive influence of Individual factors on tax compliance*

H4: *there is direct positive influence of Social factors on tax compliance behavior*

Figure II: Structural Equation Model



The following fit indices were achieved. The model fit indices are χ^2/df 1.885, GFI 0.993, AGFI 0.964, NFI 0.951, IFI 0.976, and TLI 0.916. CFI 0.975, RMSEA 0.054, PCLOSE 0.378. These are consistent with Hu & Bentler (1999) and Bagozzi & Li (2012) for model fit.

Table IV: Hypothesis Testing Result

Hypothesis	Relationship	β	SE	t-Value	P-Values	Outcome
<i>Hypothesis 1: there is direct positive influence of Institutional factors and tax compliance behavior among self-employed</i>	Inst_drivers TaxComBeh	---> .095	.047	1.714	0.087	Not Supported
<i>Hypothesis 2: there is direct positive influence of Economic factors and tax compliance behavior among self-employed</i>	Eco_drivers TaxComBeh	---> .157	.066	2.813	.005	Supported
<i>Hypothesis 3: there is direct positive influence of Individual factors and tax compliance behavior among self-employed</i>	Indv_drivers TaxComBeh	---> .133	.051	2.379	.017	Supported
<i>Hypothesis 4: there is direct positive influence of Social factors and tax compliance behavior among self-employed</i>	Soc_Factor TaxComBeh	----> .204	.060	3.579	***	Supported

Table IV explains the direct relationship among the various constructs of the independent variable (drivers of the tax compliance) and the dependent variable (tax compliance behaviour). Hypothesis test result in Table (IV) showed a positive significant influence of economic drivers (H2: $\beta = 0.157$, $t = 2.813$, $p = 0.005 < 0.05$), individual drivers (H3: $\beta = 0.133$, $t = 2.379$, $p = 0.017 < 0.05$), social drivers (H4: $\beta = 0.204$, $t = 3.576$, $p = *** > 0.001$) on tax compliance behaviour. The study however showed positive insignificant influence of institutional drivers on tax compliance behaviour (H1: $\beta = 0.095$, $t = 1.714$, $p = 0.087 > 0.05$).

On the control variables, the study result in Table (IV) showed that apart from gender which has a significant influence on tax compliance behaviour ($\beta = 0.134$, $t = 2.620$, $p = 0.009 < 0.05$), level of education ($\beta = 0.080$, $t = 1.569$, $p = 0.117 > 0.05$), sector of operation ($\beta = -0.009$, $t = -0.186$, $p = 0.853 > 0.05$) and age ($\beta = -0.027$, $t = -0.536$, $p = 0.592 > 0.05$) do not influence their extent of tax compliance.

8.0 Discussion of Findings

Study hypothesis one proposed a direct positive significant influence of institutional drivers on tax compliance behaviour. Although previous studies (Kogler et al., 2013; Lewis, 1982) found a significant effect of institutional factors on tax compliance behaviour, our study result (H1: $\beta = 0.095$, $t = 1.714$, $p = 0.087 > 0.05$) proved contrary. The insignificant relationship between institutional factors and tax compliance behavior implies that institutional drivers such as voluntary tax filing, administrative systems in tax filing does not influence the tax compliance behaviour of self-employed in Northern Ghana.

Study hypothesis two proposed a direct positive significant influence of economic drivers on tax compliance behaviour. Our study findings (H2: $\beta = 0.157$, $t = 2.813$, $p = 0.005 < 0.05$) support the hypothesis that there is a significant influence of economic drivers on tax compliance behaviour. Thus, economic factors such as tax rate, government spending, and citizen's benefits from tax obligation does influence compliance behaviour. This result confirms previous finding (Muehlbacher & Kirchler, 2010; Kuug 2016) that people will comply with tax obligation if they see the real benefits of the taxes they pay to government.

Study hypothesis three proposed a direct positive significant influence of individual drivers on tax compliance behaviour. Our study finding (H3: $\beta = 0.133$, $t = 2.379$, $p = 0.017 < 0.05$) was confirmed. The findings showed a direct positive influence of individual drivers on tax compliance behaviour among self-employed in Northern Ghana. The result therefore explains that individual factors such as fear of penalties, proper financial planning, and fear of legal battles influences self-employed to comply with tax obligations. The finding of the research confirms previous studies (Chau & Leung, 2009; Feld & Frey, 2002) that penalties and fines for non-compliance drives people to comply with tax obligation. The findings also confirms previous studies that personal attitude influence tax compliance (Chan et al., 2000; Eriksen & Fallan, 1996; Kirchler et al., 2008; Oriviska & Hudson, 2002; Trivedi et al., 2005)

Study hypothesis four proposed a direct positive significant influence of social drivers and tax compliance. Previous studies have found a positive effect of Social drivers on tax compliance behaviour (Ameyaw et al., 2016). Our study result (H4: $\beta = 0.204$, $t = 3.576$, $p = *** > 0.001$) confirms these findings. The results suggest that, social factors such as ethics, fairness and attitudes drive self-employed to comply with their tax obligation. Quite importantly, the confirming hypothesis four suggests that a societal obligation is key in driving tax compliance among self-employed in Northern part of Ghana. From the findings, social drivers recorded highest β -estimate (.204) and p-value of (***). The implication here is that social drivers strongly influence self-employed in Northern Ghana to comply with tax obligation.

Demographic variables and Tax Compliance among self-employed in Northern Ghana

Previous studies have found evidence to support the significance relationship between individual characteristics such as gender and level of tax compliance (Obikeze & Eze 2013). Our study result showed a significant influence of gender on tax compliance behaviour ($\beta = 0.134$, $t = 2.620$, $p = 0.009 < 0.05$) confirming previous studies (Obikeze & Eze 2013). However, level of education ($\beta = 0.080$, $t = 1.569$, $p = 0.117 > 0.05$), sector of operation ($\beta = -0.009$, $t = -0.186$, $p = 0.853 > 0.05$) and age ($\beta = -0.027$, $t = -0.536$, $p = 0.592 > 0.05$) were found to be insignificant with tax compliance behaviour. This findings is inconsistent with Chan et al., 2000; Kucera, 2002; Mohamad et al., 2007; Naporow 2015 and Noorbakhsh et al., 2001 who found that personal characteristics such as education influences tax compliance behaviour.

9.0 Summary and Conclusion

In this study, 361 self-employed from three northern regions of Ghana were engaged for the study. The study result showed that 50.7 percent of the respondents are males, within the age range of 28-37 years. 70.4 percent of the respondents have primary education as their highest educational qualification. Lastly, 52.1 percent of the respondents are engaged in agriculture and agric-related activities.

Four study hypotheses were tested in this paper (H1-H5). While the study found no significance influence of institutional drivers on tax compliance behaviour, the study found a significant influence of economic drivers (H2), individual drivers (H3) and social factors (H4) on tax compliance behaviour.

The study result shows that demographic characteristics such as age, level of education and sector of operation do not influence tax compliance behaviour of self-employed in Northern Ghana. The paper however found a significant influence of gender on tax compliance behaviour of self-employed in Northern Ghana.

10.0 Conclusion

On hypothesis one, the paper concludes that institutional factors such as voluntary tax filling systems, simplicity of filling procedure, openness and less complication are less essential to influence tax compliance among self-employed in Northern

Ghana. On hypothesis two, the study concludes that economic factors such as rate of taxation, audit visitors, government use of tax revenue influence tax compliance among self-employed in Northern Ghana. On hypothesis three, the study concludes that individual factors such as awareness of tax evasion penalties, offences obligation and legal battles influences self-employed to comply with tax obligations. On hypothesis four, the study concludes that social factors such as ethics, values, attitudes, perception of equity, government policies, feeling of personal obligation drives self-employed to comply with tax obligations. Social drivers represent the strongest driver of tax compliance among self-employed in Northern Ghana.

The paper further concludes that gender (weather male or females) influence tax compliance behaviour of self-employed in Northern Ghana. Age, level of education and sector of operation do not influence tax compliance among self-employed in Northern Ghana

11.0 Recommendations

The paper recommends that government must reconsider (reduction if possible) the tax rates particularly for self-employed in Northern Ghana. Also Government must ensure judicious use of tax revenue and equitable distribution of national wealth to ensure that all citizens derive the needed benefits from their tax obligations. This recommendation is based on Oberholzer (2005) who advocated that Government should be transparent in the utilization of taxpayers' "money". Lastly, Government needs to intensify her regular tax compliance checks, initiate fines and penalties on self-employed who evade taxes. This recommendation is based on the findings that economic factors and individual factors influence tax compliance.

The study also recommends that chiefs, opinion leaders, social and religious leaders in the society must join government effort to educate and inform members (citizens) on the need to be responsible by filling tax returns regularly and accurately. Festivals and social events can be used as avenues for education, information and advocacy for member to be socially responsible. This recommendation is informed based on the findings that social factors strongly influence tax compliance among self-employed in Northern Ghana. Notwithstanding, individuals must develop personal drive to be socially responsible by filling and paying the taxes promptly.

Last, government must not emphasize on characteristics of respondents in designing tax policies. Personal characteristics such as ages, level of education and sector of operation do not drive self-employed to comply with tax obligations in the Northern Ghana.

12.0 Contribution and Originality

The paper contributes to policy by revealing that tax compliance among self-employed particularly in rural communities have assumed a social dimensions. The paper strongly advocates that government include religious leaders, opinion leaders and social groups to promote tax compliance behaviour particularly in rural communities. The society has the strong potential to influence people's judgment, attitudes, orientation and philosophy towards tax compliance.

References

- Abdallah, A. (2006). *Taxation in Ghana-principles, practice and planning*. Accra: Black Mask Ltd.
- Adamopoulos, A., (2010). Financial development and economic growth. An empirical analysis for Ireland. *International Journal of Economic Sciences and Applied Research*, 3(1), 75-88.
- Adom, K., & Williams, C. C. (2012). Evaluating the motives of informal entrepreneurs in Koforidua, Ghana. *Journal of Developmental Entrepreneurship*, 17(01), 1250005.
- Agyei, A. K. (2004). Income tax evasion: The Ghanaian experience. *Journal of Management Studies*, 1(2), 40, 24-31.
- Ali, M., Cecil, H., & Knoblett, J. (2001). The effect of tax rates and enforcement policies on tax compliance. A Study of Self Employed Taxpayers. *American Economic Journal*, 29(2), 86-202
- Allingham, M., & Sandmo, A. (1972). Income tax evasion: A theoretical analysis. *Journal of Public Economics* (1), 323-338.
- Alm, J., Jackson, B., & Mckee, M. (1992). Estimating the determinants of taxpayer's compliance with experimental data. *National Tax Journal*, 65(1), 107-114.
- Ameyaw, B., Opong, A., Abruquah, L. A., & Ashalley, E. (2016). Informal sector tax compliance issues and the causality nexus between taxation and economic growth: Empirical evidence from Ghana. *Modern Economy*, 7, 1478-1497. Retrieved from <http://dx.doi.org/10.4236/me.2016.712134>.
- Ayres, I., & Braithwaite, J. (1992). *Responsive regulation*. Cambridge: Cambridge University Press.

- Bagozzi, R. P., & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. *Journal of the academy of marketing science*, 40(1), 8-34
- Benk, S., Budak, T., & Cakmak, A. F. (2012). TAX PROFESSIONALS' PERCEPTIONS OF TAX FAIRNESS: SURVEY EVIDENCE IN TURKEY. *International Journal of Business and Social Science*, 3(2).
- Braithwaite, V. (2003). Taxing democracy: Understanding tax avoidance and evasion. *Law and Policy*, 29, 3-10.
- Camel, D. (2000). Self-employed in the United Kingdom and Ireland. Current trends, policies and programmes. *Working Profiles*, 9(2) 45-58.
- Chan, C., Troutman, C., & O'Bryan, D. (2000). An expanded model of taxpayer compliance: Empirical evidence from United States and Hong Kong. *Journal of International Accounting, Auditing and Taxation*, 9(2), 83 -103.
- Chau, G., & Leung, P. (2009). A critical review of fischer tax compliance model: A research synthesis. *Journal of Accounting and Taxation*, 1, 34-40.
- Creswell, J. W., & Designm, R. (2003). Qualitative, quantitative, and mixed method approaches. *Aufl. Thousand Oaks*.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika*, 16(3), 297-334.
- Cuccia, A. D. (1994). The economics of tax compliance: What do we know and where do we go?. *Journal of accounting literature*, 13, 81.
- Dean P., Keenan, T., & Kenney F. (1980). Tax payer attitude to income tax evasion: An empirical study. *British Tax Review*.
- Eriksen, K., & Fallan, L. (1996). Tax knowledge and attitudes towards taxation: A report on a quasi-experiment. *Journal of Economic Psychology*, 17(3), 387-408.
- Fairlie, R. W. (2005). Self-employment, entrepreneurship and the NLSY79. *Journal of Labour Economics*, 20(3), 40- 47.
- Feld, L., & dan Frey, B. (2002). Tust Breeds Trust: How Taxpayer are Treated. *Economics of Governance* 3, 87-99. Retrieved from <http://dx.doi.org/10.1007/s101010100032>.
- Fischer, C., Wartick, M., & Mark, M. (1992). Detection probability and taxpayer compliance: a review of the literature. *Journal of Accounting Literature*, 1-27.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 39-50.
- Fuest, C., & Riedel, N. (2009). Tax evasion, tax avoidance and the tax expenditure in developing countries: A review of the literature. *Report prepared for the United Kingdom Department for International Development (DFID)*. London: Oxford University for Business Taxation.
- Hasseldine, D., & danBebbington, K. J. (1991). Blending economic deterrence and fiscal psychology models in the design of responses to tax evasion: The New Zealand experience. . *Journal of Economic Psychology*, 12(2), 299-324. Retrieved from [http://dx.doi.org/10.1016/0167-4870\(91\)90018-O](http://dx.doi.org/10.1016/0167-4870(91)90018-O).
- Hasseldine, J., & Li, Z. (1999). More tax evasion research required in new millennium. *Crime, law and social change*, 31(2), 91-104.
- Herrmann, A., Henneberg, S. C., & Landwehr, J. (2010). Squaring customer demands, brand strength, and production requirements: A case example of an integrated product and branding strategy. *Total Quality Management*, 21(10), 1017-1031.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1-55.
- James, S., & Nobes, C. (1997). *The economics of taxation: Principles, Policy, and practices*. New York; London: Prentice Hall Europe.
- Kirchler, E. (2007). *The economic psychology of tax behaviour*. Cambridge: Cambridge University Press.
- Kirchler, E., Hoelzl, E., & Wahl, I. (2008). Enforced versus voluntary tax compliance: The slippery slope framework. *Journal of Economic Psychology*, 29, 210-225.

- Kogler, C., Batrancea, L., Nichita, A., Pantya, J., Belianin, A., & danKirchler, E. (2013). Trust and power as determinants of tax compliance: Testing the assumptions of the slippery slope framework in Austria, Hungary, Romania and Russia. *Journal of Economic Psychology*, 34, 169-180. Retrieved from <http://dx.doi.org/10.1016/j.joep.2012.09.010>.
- Kucera, D. (2002). Core labour standards and foreign direct investment. *International Labour Review*, 141(1/2), 31-69.
- Kuug, S. N. (2016). *Factors influencing tax compliance of small and medium enterprises in Ghana*. Unpublished masters' thesis, Department of Accounting and Finance, University of Ghana. Legon, Ghana.
- Laffer, A. B. (2014). *Handbook of Tobacco Taxation: Theory and Practice*. Laffer Center.
- Lewis, A. (1982). *The psychology of taxation*. Oxford: Martin Robertson.
- Loo, E. C. (2006). Tax knowledge, tax structure and compliance: A report on a quasi-experiment. *New Zealand Journal of Taxation Law and Policy*, 12(2), 117-140.
- Martinez-Vazquez, J., Moreno-Dodson, B., & Vulovic, V. (2012). The impact of tax and expenditure policies on income distribution: Evidence from a large panel of countries.
- Ming, L., Normala, S., & Meera, A. (2005). Towards electronic tax filing: Technological readiness and responses of Malaysian tax practitioners. *Tax Nasional*, 16-23.
- Mohamad Ali, A., Mustafa, H., & Asri, M. (2007). The effects of knowledge on tax compliance behaviours among Malaysian taxpayers. *International Conference on Business and Information*. Tokyo, Japan.
- Mohani, A., (2003). *Income tax non-compliance in Malaysia*. New Jersey, USA: Prentice Hall.
- Muehlbacher, S., & Kirchler, E. (2010). Tax compliance by trust and power of authorities. *International Economic Journal*, 24(4), 607-610.
- Naporow, I. Y. (2015). *Promoting income compliance among the self-employed in the Tamale Metropolis of Ghana*. Unpublished masters' thesis, Department of Accounting and Finance, School of Business, Kwame Nkrumah University of Science and Technology. Ghana, Kumasi.
- Noorbakhsh, F., Paloni A., & Youseef, A. (2001). Human capital and FDI inflow to developing countries: New empirical evidence. *World Development*, 29(1), 1593-1610.
- Oberholzer, R. (2008). Attitudes of South African taxpayers towards taxation: A Pilot Study. *Accountancy Business and the Public Interest* (7:1).
- Obikeze, C. O., & Eze, P. O. (2013). An Empirical Assessment of the Relationship of Marketing Communication Mix and Performance of Business Organizations. *African Research Review*, 7(2), 96-112.
- Oppong, D. (2015). *Assessing the vehicle income tax payment within the informal sector: A case study of Kumasi metropolis*. Unpublished masters' thesis, KNUST Business School, College of Humanities and Social sciences, Kwame Nkrumah University of Science and Technology. Kumasi, Ghana.
- Organization for Economic Co-operation and Development (2012). *Reducing opportunities for tax non-compliance in the underground economy*. Paris: OECD.
- Otabil, E. A. (2015). *Taxation of the informal sector in Ghana: A case study of Komenda-Edina-Eguafo-Abrem Municipality*. Unpublished bachelors' thesis, Department of Accounting and Finance, School of Business, College of Arts and Social Science, Kwame Nkrumah University of Science and Technology. Kumasi, Ghana. 3(1), 374-381
- Otchere-Ankrah, B., Senior, E. T., & Junior, E. T. (2014). Impact of Corporate Social Responsibility on Buyer Behavior within the Mobile Telecommunication Sector: A Case of MTN and Vodafone Ghana Limited. *The international Journal of Business Management*.
- Pallant, C. (2011). *Demystifying Disney: a history of Disney feature animation*. Bloomsbury Publishing USA.
- Razak, A.A., & dan Adafula, C. J. (2013). Evaluating taxpayers' attitude and its influence on tax compliance decisions in Tamale, Ghana. *Journal of Accounting and Taxation*, 5, 48-57. Retrieved from <http://dx.doi.org/10.5897/JAT2013.0120>.
- Rezaei, S., (2015). Segmenting consumer decision-making styles (CDMS) toward marketing practice: A partial least squares (PLS) path modeling approach. *Journal of Retailing and Consumer Services*, 22, pp.1-15.
- Rezaei, S. & Ghodsi, S.S., (2014). Does value matters in playing online game? An empirical study among massively multiplayer online role-playing games (MMORPGs). *Computers in Human Behavior*, 35, pp.252-266.

- Richardson, M., & Sawyer, A. J. (2001). A Taxonomy of the tax compliance literature: Further findings, problem and prospects. *Australian Tax Forum*, 16(2), 137-320.
- Schneider, F., & Enste, D. (2003). *Hiding in the shadows: the growth of the underground economy* (No. 30). International Monetary Fund.
- Singh, V. (2003). *Tax compliance and ethical decision-making*. Petaling Jaya, Malaysian: Longman.
- Tabachnick, B., & Fidell, L. (2007). Multivariate analysis of variance and covariance. *Using multivariate statistics*, 3, 402-407.
- Thuronyi, V. (2013). *Presumptive taxation of the hard to tax. The hard to tax: An international perspective*. Paper presented at the conference, Atlanta, Georgia.
- Torgler, B., & Valev, N. T. (2007). Public attitudes towards corruption and tax evasion: Investigating the role of gender over time. *School of Economics and Finance Discussion Papers and Working Papers series 214*, School of Economics and Finance, Queensland University of Technology.
- Trivedi, V. U., Shehata, M., & Mestelman, S. (2005). Attitudes, incentives and tax compliance. *Canadian Tax Journal*, 52(1), 29-61.
- Venter, J. M. P., Hamel, E. H., & Stingham, M. (2004). *A student's approach to income tax: Natural persons*. Durban: Lexis Nexis Butterworths.
- Williams, R. (2001). Prosecuting non-lodgers: To persuade or punish? Centre for tax system integrity. *Working Paper No.12*. Canberra: The Australian National University.
- Yin, L., Wemah, S., & Abugre, A. S. (2016). Assessment of tax stamp strategies and income tax compliance among private entrepreneurs in Ghana. *International Journal of Innovative Research and Development*, 5(13), 78-92.

Simon Akumbo Eugene Mbilla,
John Gartchie Gatsi,
Emmanuel Yaw Arhin
Redruth Nyaaba Ayimpoya