Determinants of Tax Compliance in Ghana: The Case of Small and Medium Tax Payers in Greater Accra Region

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Abstract. The study examined the factors that influence tax compliance by small and medium tax payers, the difference in the level of compliance between small and medium tax payers and strategies to improve tax compliance in Ghana. The study through stratified sampling technique sampled 100 small and medium tax payers in Accra and other GRA officials for the study. Data was analyzed qualitatively and quantitatively. The results of the study showed that compliance cost, tax rates, tax audits and morals of taxpayers significantly influenced tax compliance. The GRA also indicated that unions and associations of businesses could help increase voluntary tax compliance of small and medium tax payers in Ghana. The study findings provide evidence that there is a significance difference in the tax compliance level between small and medium scale enterprises. The difference can be largely attributed to the inability of small enterprises to file their tax returns on due dates and also to keep proper books of records of their business transactions. The study recommends organizing workshops for businesses to train them on the need to pay their taxes and keep proper records of their transactions, increasing the rate of audits of businesses, imposing fines and penalties for defaulting businesses.

Keywords: tax compliance, small tax payers, medium tax payers, ghana revenue authority

Introduction

The challenge with tax compliance is an old age issue as nobody enjoys paying taxes (Ali-Nakyea, 2014). Government and tax authorities the world over have been faced with the challenge of findings solutions to non-compliance in tax obligation especially in developing countries like Ghana (Oteki, & Ezekiel, 2014). The problem of tax non-compliance in developing countries like Ghana is mainly as a result of the large informal sector and the lack of proper systems and structure to enforce tax laws (Aryee, 2007). It is always difficult to convince tax payers to willingly pay their taxes. This has an undesirable impact on the economy (James & Alley, 2004; Chepkurui, Namusonge, Oteki, & Ezekiel, 2014). The main objective of tax administrators in any country is to improve on the level of voluntary tax compliance thereby reducing the tax gap and the compliance gap (Silvani, 1992). It is in the light of encouraging voluntary tax compliance that the government of Ghana introduced the self-assessment policy to allow tax payers calculate their own tax liability and voluntarily pay (Ali-Nakyea, 2014). This approach by government has placed the responsibility of individual taxpayers thereby avoiding the cost of determining each tax payer tax liability and collecting them. The downside of this policy is that more people will not voluntarily comply with their tax obligations especially when the level of enforcement is low.

The cost of ensuring that tax payers comply with tax is a major impediment in ensuring good tax compliance behavior from taxpayers (Bird and Zolt, 2005). Research has also established that tax

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compliance costs for tax payers is high among informal sector tax payers because of the lack of knowledge of the tax laws and skills to determine their tax liability (Shome, 2004). Most tax administrators the world over create additional burden on businesses in terms of reporting for tax purposes with complex tax laws (Keen, 2011). This has resulted in increases in costs for entities and persons who attempts to comply with the tax laws (Barrer, 2005).

The goal of every tax system in a country is to be efficient and professional in collecting tax revenue to help government in its fiscal policy. Bird and Zolt (2005) argue that achieving this goal has been difficult for tax administrators even though recent experience shows substantial improvement in some parts of the world. A tax policy is as good as its implementation. In essence, the administrative component of a tax system is very critical just as the tax policy and its design (Bird & Zolt, 2005).

The problem of tax non-compliance is a major challenge for most governments especially in developing countries like Ghana which need to be addressed. The issue that affect tax compliance seem similar in most jurisdictions as tax authorities are always confronted with the challenge of convincing tax payers to comply with the laws of taxation in the country. Research and policy makers agree that generally small and medium tax payers do not comply with their tax obligations, even though it is also a fact that some do actually comply with the tax laws (Kamleitner et al., 2012). The entities in the informal sector that form part of the small and medium tax payers who comply with the tax laws do so as a result of some reasons or factors. The real question therefore is what factors influence these entities to voluntarily comply with their tax obligations.

Several studies have been conducted in tax compliance and the factors that may influence tax compliance or non-compliance in different jurisdiction (Otieku, 2013; Aryee, 2007; Atawodi & Ojeka, 2012; Kamleitner et al., 2012). Other strand of literature has examined the cost of tax compliance by small and medium scale enterprises in other Africa countries (Adebisi and Gbegi, 2013; Poutziouris et al., 1999; Abrie & Doussy, 2006) Venter & De Clercq, 2007; Smulders et al., 2012). Despites these studies, Adebisi and Gbegi (2013) argue that there are little studies on factors that account for voluntary tax compliance by small and medium enterprises. Previous studies have revealed that factors such as penalties, tax rates, cost of compliance as potential determinants of voluntary tax compliance. Other studies have that have been identified to influence tax

compliance include the size of the business, the industry the business belong, capital structure even though they have not been empirically tested especially in the African context (Elmirzaev & Kurbankulova, 2016).

Also, one of the main reasons for tax reforms is to achieve tax compliance (Nsubuga et al. 2017). The level of tax compliance in a country has a direct relationship with revenue generation in every country Kurbankulova, (ElmirZaev 2016). This & notwithstanding, many developing countries including Ghana have low level of tax compliance and high incidence of tax evasion (Owen, 2006; Boakye, 2011; Adebisi and Gbegi, 2013; Tanko, 2015). The question as to whether the various legal and structural reforms Ghana has embarked upon has enhanced tax compliance has also not been empirically examined.

The Ghana Revenue Authority classifies tax payers into large, medium and small tax payers. Tax compliance for large tax payers are high as they can hardly avoid being noticed. Large tax payers are organizations with annual turnover above $GH\phi5,000,000$, medium tax payers are those with annual turnover of $GH\phi120,000$ to $GH\phi5,000,000$ while small tax payers have annual turnover below $GH\phi120,000$. This study unlike previous studies on tax compliance does not focus on all SMEs but those that fall within the classification by GRA as small and medium tax payers.

Previous studies in Ghana have focused on tax paying behaviours of tax payers and how reforms enhance tax compliance but have to specifically examined the factors that influence tax compliance in Ghana (Otieku, 2013; Acheampong et al. (2016). Even some though previous studies have examined the level of tax compliance, they have not sampled small and medium tax payers as classified by the GRA as those studies examined SMEs tax compliance in general. The studies have usually sampled firms from the informal sector (Acheampong et al., 2016; Tekper, 2007). This study therefore overcomes these deficiencies by examining determinants of tax compliance by small and medium tax payers in Ghana.

Contributions of the study

The implication of the study is viewed along three strands: research, practice and policy.

Significance to research; the study adds to the body of knowledge by investigating into the factors that enhance voluntary compliance by small and medium tax payers in Ghana. This is important as previous studies in Ghana have not focused on determinants of tax compliance.

In the area of practice, Small and Medium tax payers and other players in the formal and informal sector will also find this study useful in that it will help them understand the moral obligations behind tax payment and the benefits that are derived when one complies.

Lastly, Significance to policy; the study will provide feedback to government on policies that should be undertaken and the needed education or training that should be embarked on to increase voluntary compliance.

Literature Review

Tax compliance

James & Alley (2004) assert that the definition of tax compliance is usually bordered around the extent to which business entities (taxpayers) comply with tax laws of a given jurisdiction. There are three different forms of tax compliance (payment compliance, filing compliance, and reporting compliance) and according to Brown & Mazur (2003) tax compliance can be well defined in consideration to these forms. The Internal Revenue Act, 2000 Act 592, defines tax compliance is the ability and willingness of taxpayers to comply with all available tax laws, declare yearly correct income statement and also pay correct amount of taxes at due times. Furthermore, Kirchler (2007) see tax compliance as the willingness of taxpayers to pay their taxes amounts due. According to Ming et al., (2005) business entities' responsiveness towards tax compliance also comprises the readiness to be registered for tax purposes and timely prompting of tax authorities of business status as a tax payer. Also, businesses must regularly submit their tax returns every year as and when necessary and as well make payments on time. Generally, tax compliance may be said to mean taxpayers willingly satisfying all tax obligations as specified by the state without being compelled to.

Singh & Bhupalan (2001) outlined some conditions necessary for businesses to be able to effectively comply with tax laws of a given state. They indicated that for taxpayers to be able to comply with tax laws, it requires some extent of honesty, absolute knowledge base of existing country's tax conditions and the ability of the business to use that knowledge to timely, accurately and completely adhere to tax obligations of the state.

However, as also emphasized by James & Alley (2004), tax authorities face serious challenges in an attempt to enforce tax laws as it is humanly difficult convincing taxpayers to at will comply with tax requirements. In the meantime, Atawodi & Ojeka (2012) point out that tax authorities within the west African sub-region already bear additional cost into making the already tax compliant businesses in fulfilling their tax obligations. On the other hand, economic and administrative structure of Ghana has made it more difficult for tax authorities to enforce tax laws (Terkper, 2007). This is because SMEs in Ghana are mostly found in the informal sector of the economy hence there are difficulty to tax them, paving way for these businesses to easily invade taxes. Terkper (2007) also adds that the few tax compliant businesses are over taxed becoming a bane on the growth and development of these said companies, hence subsequently affecting the revenue returns of tax authorities. As pointed out, the solution to this challenge is for tax authorities to widen tax net of the country which however has been a known challenge and calls for massive concern (Terkper, 2007).

Again, according to Atawodi & Ojeba (2012), the perceived high cost involved in businesses complying with tax obligations is already a big challenge as already pointed out by Abrie & Doussy (2006) that tax compliance requirements have been a major discouraging factor placing a heavy administrative challenge on SMEs.

Theoretical framework and hypothesis development

Several factors may influence tax payer's attitude towards tax compliance which can also have an impact on their behaviour. These factors that are potential determinants of tax compliance an or non-compliance vary from country to country as there is behavioural factors, cultural factors and other socio-cultural factors that may influence tax compliance (Kirchler, 2007; Abrie & Doussy, 2006; Chepkurui et al., 2014).

Economic factors of tax compliance

Economic factors are factors which have economic effects on the taxpayer. They include tax rates, tax audits, tax compliance costs, tax benefits and penalties or fines.

Tax Audits

Tax audits have been found to be one of the measures that can be used to enhance tax compliance

by tax authorities (Loo et al., 2012). The use of tax audit ensures that tax payers do a thorough job in filling their tax returns as any anomaly detected through tax audits will attract some penalties. Tax payers who are regularly audited by the revenue authority are more likely to voluntarily comply as they fear they may be caught through the audit. On the other hand, tax payers whose tax returns and activities are not regularly audited are less likely to comply with their tax obligations. Previous studies show that frequent tax audit enhances the level of tax compliance (Loo et al., 2012; Sia, 2008; Sheikh-Obid, 2004). In line with the above arguments and findings of previous studies, we hypothesize that:

H1: There is a positive association between tax audits and tax compliance in Ghana

Tax Rates

High tax rates have a tendency to demoralize exertion and business, while empowering all way of exercises to maintain a strategic distance from them. Raising minimal assessment rates will probably urge citizens to sidestep impose more (Witte & Woodbury, 1985; Ali, Cecil, & Knoblett, 2001; Torgler, 2007) while bringing down duty rates does not really expand charge consistence (Trivedi, Shehata, & Mestelmen, 2004; Kirchler, 2007). Allingham & Sandmo (1972) reasoned that citizens may pick either to completely report wage or report less, paying little respect to impose rates.

Since the effect of assessment rates was begging to be proven wrong (positive, negative or no effect on avoidance), Kirchler, Hoelzl & Wahl (2008); and McKerchar & Evans (2009) recommended that the level of trust amongst citizens and the legislature has a noteworthy part in discovering the effect of expense rates on consistence. At the point when trust is low, a high duty rate could be seen as an out of line treatment of citizens and when trust is high, a similar level of assessment rate could be translated as commitment to the network (Kirchler, Hoelzl, & Wahl, 2008).

Previous studies have shown that the rate of tax influence tax compliance (Abdul-Razak & Adafula, 2013; Atawodi &Ojeka, 2012; Loo et al.; 2012; Sheikh-Obid, 2004). Mohd-Hanefah (1996) argues that high tax rates result in high tax non-compliance. In line with the above arguments, we hypothesize that:

H2: There is a negative association between tax rates and the level of tax compliance in Ghana

Penalties

Citizens when made to pay higher fines for sidestepping charges have the impact of preventing them from future avoidance. Experimentally, the obstruction impact of fines couldn't generally be bolstered. The watched impacts were weaker than anticipated and a few examinations even propose that an expansion of punishments can have unfortunate impact and result in more expense shirking (Kirchler, Hoelzl, & Wahl, 2008). Alm, Jackson & Mckee (1992) bolsters the proof that fines do influence charge consistence however the effect was essentially zero. Penalties for tax non-compliance serve as deterrent and compel small and medium business and other tax payers to voluntarily comply with their tax obligations (Yong, 2005). Previous studies have shown that there is a positive relationship between penalty rate and the level of tax compliance (Loo et al., 2006; Sia, 2008; Sheikh-Obid, 2004). In line with the findings of these studies, we hypothesize that:

H3: There is a positive association between penalties and the level of tax compliance in Ghana.

Tax Compliance Costs

The cost to the tax payer to comply with the tax laws in fulfilling their tax obligations as business influences their level of compliance. Compliance costs can be partitioned into three sections: time spent, money costs and other expenses. The aggregate time spent contains representative expenses (in-house staff) and outer costs (charges paid to outside bookkeepers and different counselors). These consistence costs incorporate costs that are caused by an organization, however are outside the ability to control of its administration (Abdul-Jabbar & Pope, 2008).

Tax compliance costs must therefore be taken into consideration by various governments to ensure that the tax legislation is obeyed. Studies show that high compliance cost deter tax payers from tax compliance (Sia, 2008; Loo et al. 2012). In line with the above arguments, the study hypothesizes that:

H4: There is a negative association between tax compliance cost and the level of tax compliance in Ghana.

Non-economic factors for compliance

Research on tax compliance factors have mostly focused on economic and financial factors to the detriments of non-financial factors that can influence the level of voluntary tax compliance and noncompliance (Niesiobedzka, 2014; Loo et al. 2012; Alabede et al., 2011). There are numerous noneconomic elements to influence the level of assessment consistence. Numerous investigates have been done to incorporate these non-economic components to clarify the conduct of expense consistence under the system of monetary examination (Alm, Sanchez, & DeJuan, 1995). These non-economic factors are sorted into mental elements and institutional elements.

Tax Knowledge

From a tax administration point of view, analysts have reasoned that public education of tax payers about their tax obligation enhances their level of tax compliance (Loo et al. 2010; Roshidi et al., 2007). Eriksen & Fallan (1996) guaranteed that learning about assessment law is thought to be critical for inclinations and states of mind towards tax assessment. People knowledge of the tax laws helps them to comply with their tax obligations easily (Nsubuga et al., 2014; Bruce-Twum, 2014). Eriksen & Fallan (1996) argues that a fruitful method for lessening tax evasion is to give more tax information to tax payers. Studies have shown that there is a positive relationship between tax knowledge and the level of tax compliance (Abdul-Razack &Adafula, 2013; Ahmad et al., 2007; Palil & Lymer, 2009). In line with the above arguments, we hypothesize that:

H5: There is a positive association between tax knowledge and the level of tax compliance

Firm Characteristics and Tax Compliance

Studies show that some firm characteristics influence the level of tax compliance (Tekper, 2007). It has been shown that firm size, business experience influence tax rates. Previous studies have established that the size of a firm is an important determinant of tax compliance (DeLuca et al., 2007). It can be argued that bigger entities are more likely to comply with their tax obligation compared to smaller ones because of their visibility which makes its practically difficult to avoid paying taxes without being noticed. Also, larger firms may enjoy some benefits from paying taxes which will motivate them to comply with their tax obligations. Acheampong et al (2016) found that there is a positive association between business experience and tax compliance. Moreover, older firms have the experience in filling their returns and as such

are more likely to comply with their tax obligation. In line with the above arguments, we hypothesize that:

H6: There is a positive association between business size and business experience and the level of tax compliance in Ghana.

Methodology

The population of the study involves all small and medium tax payers within the greater Accra metropolis. Since the population was connected to GRA, the study focused on using the status of a taxpayer. Thus, the research used the definition of small taxpaying unit and medium taxpaying unit given by the Ghana Revenue Authority. Medium taxpayers are the taxpayers with annual turnover of GH¢120,000 to (GHS 5 million) and small taxpayers are taxpayers with annual turnover below GH¢120,000.

Greater Accra region had seven (7) medium taxpayers' offices and fifteen (15) small taxpayers' offices indicating that the region has a higher number of registered small and medium enterprises and as such the sample was drawn from the region. Financial Managers, General Managers, Accountants and owners of small and medium tax payers were targeted as sample elements/respondents because they were deemed to have the requisite knowledge to answer the questionnaire. In addition to these, heads of the medium taxpayers' offices and small taxpayers' offices were interviewed on the strategies that the units were using to enhance voluntary compliance among the small and medium tax payers. Purposive sampling technique was used to sample 100 respondents comprising of small and medium tax payers. The 100 respondents were drawn from all the 22 tax paying district in Accra using purposive sampling.

Measurement of variables

Dependent Variable

The dependent variable used in this study is tax compliance. Previous studies had used score to measure tax compliance or level of tax compliance (Alm et al., 1992; Alm et al. 1995; Kuug, 2016). Tax compliance was measured using a score. Since all the respondents had certain level of compliance because they were all paying their taxes, the objective is to find out if the respondents are practicing proper bookkeeping and whether filing of returns are done on time. Total score was derived through a set of four (4) questions. Keeping all physical receipts in an organized manner was given a minimum score of 0.2 (1 mark multiplied by 0.2) and a maximum score of 1 (5 marks multiplied by 0.2). Practicing physical bookkeeping to record income and expenses in an organized manner was given a minimum score of 0.2 (1 mark multiplied by 0.2) and a maximum score of 1 (1 marks multiplied by 0.2). Record income and expenses in an organized manner using a computer and specialized software was given a minimum score of 0.2 (1 mark multiplied by 0.2) and a maximum score of 1 (1 marks multiplied by 0.2). Finally, period in which tax returns were filed will be given a minimum score of 0.25 (1 mark multiplied by 0.25) and a maximum score of 1 (4 marks multiplied by 0.25). A total minimum score of 0.85 will be given to entities with poor record keeping systems and inability to file tax returns on time. On the extreme end, a total maximum score of 4 was given to entities that filed their tax returns on time and also had an excellent system for record keeping. The coding system was adapted from the study of Kuug (2016).

Independent Variables

The independent variables for the study are, tax compliance costs, size of the business, business experience, penalties, tax rates, tax audits and moral reasons. Minimum score of 1 that was given if the factor didn't influence tax compliance and maximum score of 5 if the factor influenced tax compliance based on a likert scale measure. The variables were measured in line with previous studies (Acheampong et al. 2016; Loo et al., 2010; Kuug, 2016)

Data analysis

Data analysis is simply the process of preparing and organizing the data to fit into the research model (Sanders, 2011). A non-parametric test such as Mann-Whitney U and Wilcoxon W. (for 2 independent samples) was used to test the difference in tax compliance levels among small taxpayers and medium taxpayers. In addition, Kruskall Wallis (for more than 2 independent samples test) was used to test the tax compliance level between industries or sectors.

Regression analysis was used to identify the factors that influence tax compliance among small and medium tax payers in Accra and also to establish relationships.

General model

 $y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \dots + \beta kXk + \varepsilon$

Specified Regression Model $TC = \beta_0 + \beta_1 TK + \beta_2 TcC + \beta_3 BS + \beta_4 BI + \beta_5 BE + \beta_6 TA + \beta_7 TR + \beta_8 P + \beta_9 M + \varepsilon$

Where

Table 1
Measurement of Variables

Indicator	Measure
5 variables (statement on tax	Scale of 1 to 5
regulations)	
Estimated cost range in scale	Scale 1 to 5
Based on turnover and	Dichotomous
classification by GRA	
Variable based of firm age,	Scale of 1 to 5
staff expertise in tax	
Statement on whether GRA	Dichotomous
performed tax audit	variable
Statement on whether tax	Scale of 1 to 5
rate influence tax compliance	
Statements on whether	Scale of 1 to 5
penalties influence tax	
compliance	
Statement of how morality	Scale of 1 to 5
influence tax compliance	
	5 variables (statement on tax regulations) Estimated cost range in scale Based on turnover and classification by GRA Variable based of firm age, staff expertise in tax Statement on whether GRA performed tax audit Statement on whether tax rate influence tax compliance Statements on whether penalties influence tax compliance Statement of how morality

Analysis and Discussion of Findings

Demographic characteristics of small and medium tax payers

This section dealt with the nature of business entity, classification according to GRA, economic sector, finance method, age and current staff strength of the entity. The table below represents the total 100 respondents' view on the type of business operations and GRA business size according to GRA.

Table 2 Classification of Business

Classification		Frequency	Percent
Small Tax payers	Between 50,000-120,000	46	46
Medium Tax payers	Between 130,000-5,000,000	54	55
Total		100	100

Source: Field Data, 2018

The results from Table 2 shows that 46% of the business sampled had an annual turnover of between GH ϕ 500,000 to GH ϕ 120,000 which falls within the classification of small tax payers by the GRA. On the other hand, majority of the businesses sampled had an annual turnover of between GH ϕ 130,000 to GH ϕ 5,000,000 which falls within the medium tax payers classification by the GRA.

Table 3
Showing Respondents View on the Their Businesses' Sector
Economy (OUT of 100 Respondents)

Business Classifications	Frequency	Percentage (%)
Agro-processing	19	19
Manufacturing	16	16
Transport	13	13
Trade	22	22
Artisan	11	11
Hospitality	9	9
Real estate	6	6
Financial service	4	4

Source: field data, 2018

Again, it can be observed that majority of the tax payers operate under trade, agro-processing and small scale manufacturing topping the list of 100 respondents with 22, 19 and 16 percent marks respectively. On the other hand, it was discovered that very least of small and medium tax payers operated under the financial service, real estate and hospitality sector. As presented in Table 3 above, only 4, 6 and 9 percent of the total businesses (tax payers) are in the financial, real estate and hospitality sector.

Again, the time duration spent by businesses to file, complete and submit tax forms was assessed to help ascertain the willingness and commitment levels of these businesses. From the data gathered, it was noted that 57 of the 100 respondents spent three months in preparing, finishing and submitting of their tax forms. It was also found that 33 of the respondents spent five weeks to complete and submit their tax files while only 10 spent six days.

Also, the time spent by taxpayers to pay their taxes was examined. It was observed that majority (49 out of the 100 respondent) paid their taxes annually, 21 paid theirs semi-annually while 19 and 11 of the respondents paid their taxes within quarterly and monthly time periods respectively.

As shown in the table below, the high times spent by taxpayers to submit and pay tax is an indication of a weaker commitment in complying with tax obligations.

Table 4
Tax Compliance Periods

Tax filling and submission	Time Categories	Small Taxpayers	Medium Tax payers	Total
duration	Months	16	41	57
	Weeks	30	3	33
	Days	0	10	10
Total		46	54	100
Tax payment	Monthly	0	11	11
duration	Quarterly	9	10	19
	Semi- annually	10	11	21
	Annually	27	22	49

Tax obligations

This section seeks to find out the extent or how timely tax payers complied with tax obligations.

The table below indicates businesses' time duration before tax registration.

 Table 5

 Businesses' Time Duration before Tax Registration

	Position	Frequency/ percentage
Operation	Yes	89
before registration	No	11
Duration	Below 1 year	21
before registration	Between 1 and 2 years	38
for tax	Between 3 and 5 years	29

Also from the table above, it was identified that businesses within the Accra Metropolis operate for a minimum average of two (2) years before they officially register for tax obligations. 21 out of 100 businesses operate within up to one (1) before they register for tax. Also, whereas most of the businesses (38%) contacted operate up to two (2) before they avail themselves for tax, 29 others operate as high as up to five (5) years before they register for tax obligation.

It could be concluded that voluntary tax compliance by small and medium taxpayers is not encouraging as most of the businesses beat tax obligations as long as even five (5) years. However, the operational experience levels of these entities are a clear indication that their understanding of tax issues is high. Apparently, the cause to this tax neglect by businesses could be as a result of poor company data coupled with poor tax law enforcement.

The study also sought to look at the factors that motivate the other taxpayers to submit themselves to tax obligations. It was found out that "legal requirements", "to avoid sanction" and opportunities associated with tax compliance such as easy access to loans and government contracts were key reasons that motivated tax payers to register themselves for tax obligations. "legal requirements" scored highest with 39 out of 100 respondents scoring "very important and important" followed by loans and access to government contracts where 28 of the respondents also scored for "very important" and "important" and then followed by "avoid sanctioning" (16). Eleven (11) of the remaining 17 argued for industry requirements as their reasons for registering for tax obligations. The least of the reasons why businesses register for tax purposes was "moral reasons", scoring only six (6) out of the 100 respondents.

Attempts were also made to assess the number of employees who performed tax accounting and their education qualification. It was found that all the respondents have employees who perform their company's tax accounting tasks. 3-5 categories dominated the number of people in a company that perform tax accounting (66 respondents). Only 34 respondents argued for all the range of numbers performing tax accounting for their respective businesses. Surprisingly, it was discovered that majority of personnel who were employed to perform the company's tax accounting tasks are BECE levels (12) and SSSCE leavers (51) and cumulatively constituted (63) out of the total 100 respondents. 26 others have HND while 9 have degree with only 2 having masters' qualification.

Source of information for tax payers on tax regulations and payments.

Table 6 Source of Information for Tax Payers

Sources of	Ranks/score			
information	Not Useful	Fairly useful	Useful	Extremely Useful
GRA	5	19	32	44
brochures/newsletters/				
booklets				
GRA website	3	22	27	48
GRA seminars	4	13	37	46
GRA billboards	46	30	15	9
Bulletin boards at GRA	39	29	22	10
offices				
Newspapers	28	42	19	17
Radio	18	33	29	15

From Table 6, it shows and ranks various source of tax information from tax authorities and how useful they are in enhancing tax taxpayers' acquisition of tax information and knowledge. It is found that the most useful and means of access to tax information according to the 100 respondents are brochures, newsletter and booklets from GRA as well as websites and GRA organized seminars. A sum total of 76 small and medium taxpayers indicated that newsletters and booklets from GRA are extremely useful (44) and useful (32). A total 75 indicated that GRA website is extremely useful (48) and useful (27). Also, as large as 83 indicated that GRA organized seminars are extremely useful (46) and useful (37) in their access to tax and other forms of information. Respondents point out that billboards and bulletin boards from GRA is fairly or not useful to their access to tax information.

On the other hand, respondents considered radio and newspapers as somehow useful in getting information on tax.

It was also found that respondents key and reliable sources of information and education are those directly from the tax authority such as through its websites, seminars, brochures, newsletters and booklets. This means that the responsibility of ensuring tax compliance among small and medium taxpayers is mainly dependent on the tax authority itself.

Among other things, one of the main objectives for the study is to determine the driving factors that influenced voluntary tax compliance among small and medium tax payers in the Accra Metropolis of Ghana. A number of strategies were outlined and respondents' views collected on them. The factors that were outlined include tax knowledge, compliance costs, business size, industry, experience, penalties, capital structure, tax rates, tax audits, and morals of people. The table below gives a summary view of respondents' impression on the factors that enhanced tax compliance.

Ranking of factors that influence tax compliance

Influencing factors	Very high/high	Low/very low
Tax Training/ Knowledge	53	47
Tax Compliance costs	74	26
Size of Business	57	43
Type of Industry	49	51
Business Experience	33	67
Penalties	59	41
Tax Rates	83	17
Tax Audits	68	32
Moral reasons	28	72

Table 7

Source: survey data, 2018

The ranking represents average scores from respondent's responses to the questionnaires. As can be observed from the table, tax rates and cost of tax compliance topped the chart as the most influencing factors for small and medium scale taxpayers. 64 out of the 100 respondents argued for the amount of cost incurred while as high as 83 also argued that tax amounts are a major key factor that predicts voluntary tax compliance. This is followed by tax audits, penalties, size of business and tax training/knowledge as respondents scored 68, 59, 57 and 53 as very high and high influencing factors for complying with tax obligations. On the other hand, moral reason by taxpayers according to data from respondents is the least motivational factor for tax compliance. As high as 72, 67 and 59 of the 100 companies contacted marked very low and low in influencing factor for tax compliance by small and medium taxpayers.

Singh's (2003) work examined whether tax knowledge through training could enhance tax compliance by taxpayers. Works by Eriksen & Fallan (1996) concluded that there was a positive relationship between taxpayers' access or level of knowledge of tax information and compliance. Conversely, a work by Lewis (1982) supported that of Eriksen & Fallan, as his contrary view was poor knowledge of tax information by taxpayers brought about negative attitude. This means that improved taxpayers' knowledge on regulations of taxation and access to basic compliance guidelines can improve tax compliance.

Quite contrary to this study, taxpayers' knowledge of tax regulations and access to information does not extremely influence tax compliance.

However, whereas studies by Chepkurui et al. (2014) showed that tax compliance costs averagely influenced SMEs' compliance to tax, this studies on the other hand shows a strong relationship- the higher the cost the less SMEs comply with obligations and vice-versa. Just like compliance cost, this study also concludes that tax rate is a key factor that influences small and medium level taxpayers. These findings agree with that of Atawodi and Ojeba (2012) and Acevska (2002), which also concluded that high tax rate respectively accounted for the low compliance to tax by SMEs in Nigeria and Macedonia. This was supported by another research conducted by Acevska (2002). As indicated, findings of this research also support the views of above mentioned researches.

Differences in levels of tax compliance

 Table 8

 Ranking for Difference in Tax Compliance

			N	Mean Rank	Sum of Ranks
Tax			5		
Compliance		Small	4	133.67	30877
-	Business	Mediu	4		
	size	m	6	329.33	76076

The results from the ranking of means shows that medium tax payers had the highest mean rank of 329.33 compared 133.67 by small tax payers. The results show that tax compliance is higher for medium tax payers compared to small tax payers. The result is consistent literature and in line with the main arguments by the GRA that small tax payers are the highest defaulter compared to large and medium tax payers.

Levels of tax compliance between small taxpayers and medium tax payers

Table 9 Test Statistics

		Tax compliance
Man-Whitney U test	Man Whitney U-test	408
	Wilcoxon W	3087
	Z	-15.776
	Sig (2-tailed)	0.000
Kruskal Wallis Test	Chi-Square	183.154
	Df	(
	sig.	0.000

Source: Field data, 2018.

Mann-Whitney and Wilcoxon (MWW) tests showed that there were significant differences between small and medium enterprises in terms tax compliance levels (p<0.05, z = -15.786).

The results of the Z value of -15.776 with a p value of p=0.000 suggest that it is statistically significant. This suggests that there is statistically significant difference between tax compliance for small enterprises as compared to medium enterprise in Ghana. The result is consistent with the general expectations of the study and in line with arguments presented by the Ghana Revenue Authority in several forums.

A Kruskal-Wallis Test also showed that there was a statistical significant difference in the tax compliance score among the different sectors. A chi-square of 183.154 and a p value of 0.00.

The first objective of this study was to determine the statistical significance difference in the compliance level between the small and medium scale enterprises.

The results from the study suggested that there was a statistical difference in the tax compliance level of small and medium scale entities. As expected, medium taxpaying units were more tax compliant than the small taxpaying units. Also, taxpaying units within the financial services sector were also seen to be more tax compliant than taxpaying units in other sectors like the artisans. Some of the factors accounting for this difference in the compliance levels between small and medium taxpayers were the failure of most of the small taxpayers to file their tax returns on due dates and the keeping of improper records.

Factors that influence tax compliance

To examine the determinants of voluntary tax compliance factors that influence voluntary tax by small and medium tax payers, a regression analysis was adopted. The results from the regression analysis are presented below.

Table 10 Results on Determinants of Tax Compliance

	Unstandardised Coefficent		Standardised Coefficeint		
Variables	Beta	Standard Error	Beta	Т	Sig
Constant	1.086	0.259	1.345	4.194	0.000
TK	0.067	0.07	0.058	0.954	0.341
TcC	0.23	0.066	0.226	3.471	0.001
BS	-0.038	0.052	-0.059	-0.723	0.47
BI	0.009	0.056	0.014	0.155	0.877
BE	-0.082	0.058	-0.101	-1.414	0.158
Р	-0.059	0.052	-0.065	-1.135	-0.257
TR	-0.146	-0.07	-0.158	-2.08	0.038
ТА	0.166	0.061	0.195	2.72	0.007
М	-1.28	0.034	-2	-3.766	0.000

Dependent variable is represented by a score for Tax Compliance. The independent variables comprise of tax knowledge (TK) which measures the understanding and application of tax requirements; tax compliance costs (TcC) measures all the costs incurred by taxpayers to be able to comply with the tax laws with exception of the tax liability; business size (BS) is a dummy variable which measures whether the business is small or medium. Business industry (BI) refers to the sector the business belongs. Business experience (BE) is the number of years the entity has been in operation, Penalties (P) refers to the fines given to business for defaulting in their tax obligations, Tax Rates (TR) is the rates used to compute the tax liability of businesses, and Morals of Taxpayers (M) measures the attitudes or norms of the taxpayer. Tax Audits (TA) represents the likelihood of the firm to be audited.

The results showed that the variable that largely predicted tax compliance of small and medium tax payers from the study are compliance cost. In addition to these variables Tax Rates, Tax Audits and Morals of the taxpayer also contributed to the prediction of tax compliance by the small and medium tax payers. Tax audits had a positive relationship on tax compliance. However, rates and ethics had a negative relationship on tax compliance.

Previous researchers had questioned whether enhancement in tax knowledge increased tax compliance (Singh, 2003; Harris, 1989). Eriksen & Fallan (1996) were of the view that the level of education of a taxpayer played an important role in the understanding of taxation, especially regarding laws and regulations of taxation. Lewis (1982) was also of the view that poorer tax knowledge correlated with negative attitudes towards taxation implying that a better attitude could be achieved through better tax knowledge. This study however showed that tax knowledge did not have a significant impact on the taxpayers' ability to comply.

A research conducted by Chepkurui, Namusonge, Oteki & Ezekiel (2014) showed that tax compliance costs was rated average in influencing SMEs tax compliance. However, in this study, it was found that tax compliance costs and capital structure were the most influencing factors on tax compliance out of the 10 factors.

Atawodi & Ojeba (2012) concluded that tax rate was the most crucial factor influencing SMEs to either comply with tax laws or fail to comply with tax laws. They were of the view that high tax rates accounted for SMEs failure to pay taxes in Nigeria. This was supported by another research conducted by Acevska (2002). He also found that the most serious institutional barriers for Macedonian SMEs were the high taxes. This research goes to support the views of the mentioned researches because tax rates were in this study was seen to be an important factor.

According to Chepkurui, Namusonge, Oteki and Ezekiel (2014), there was a positive relationship between attitudes and tax compliance. They were of the view that, an increase in the attitudes of SMEs could lead to an improvement of tax compliance. However, this research goes contrary to those findings since it discovered a negative relationship between ethics and tax compliance. Interestingly, tax knowledge, business size, industry type, business experience and penalties did not have the predictive power to explain tax compliance.

Strategies GRA can adopt to improve tax compliance

Four of the heads of the Domestic Tax Revenue Division (DTRD) of the Ghana Revenue Authority (GRA) were interviewed on the strategies that their unit used to increase voluntary compliance.

One of the respondents said one of the difficulties that the respondents are facing was the inability of entities (especially the small taxpayers) to file their income tax returns. He noted that some did file but mostly after the given date which is usually on 30th April each year. When asked what they usually do about it, he indicated that their service department usually placed calls to entities that were yet to submit their returns when the time for filing was near elapsing to remind them, they had not yet filed. When this notice was left unheeded, the compliance and enforcement unit then proceeded with the necessary process to get the entity to comply.

In addition to this, another respondent did say that there were times when a common mistake in relation to tax issues was being committed by entities either in the same sector or the same geographical area. When such issues arose, what the unit did was to organize workshops or seminars for those identified entities in groups to train them on the right treatment of the said issue.

Respondents from the selected businesses were asked an opened-ended question on what strategies the revenue authority could use to increase voluntary compliance among small and medium tax payers. Majority of them believed the GRA could increase voluntary compliance if they could organize workshops to educate businesses on the need to pay taxes and the benefits that could accrue to them by being compliant with tax laws and regulations. Some were of the view that, the authority could increase voluntary compliance if they came out with innovative incentives for entities that complied with the laws. This could make potential taxpayers eager to register their businesses and also to comply with the regulations. In addition to these suggested strategies, some indicated that frequent visits from officials from the GRA to the premises of their businesses, fairness in the handling of issues, friendly and welcoming staff of GRA and enforcing the laws on tax could go a long way to increasing voluntary compliance among small and medium tax payers in Ghana.

One respondent of the GRA indicated that as part of their strategies, they were targeting unions and associations like the Ghana Private Transport Union (GPTRU), Ghana Union of Traders Association (GUTA), Ghana Hairdressers and Beauticians Association (GHABA) so they can train their members on the need to register for tax purposes and stay compliant with the tax laws. Although the findings from the business owners and managers did not consider the industry one was operating as being able to exert so much influence on its members to be tax compliant, the heads of the various units at GRA believed that unions and associations could help their outfit to increase voluntary compliance.

Between 1987 and 2003, the tax administration of Ghana introduced a strategy called Identifiable Grouping Taxation (IGT). This approach allowed the

associations of the informal sector to collect income taxes from their members. The arrangement started with the Ghana Private Road Transport Union (GPRTU) which is the largest passenger transport union (Joshi & Ayee, 2008). This policy was later extended to thirty two other associations in the informal sector because of the good achievements attained in the early years.

IGT was recognized for improving the revenue collections from the informal sector (Joshi & Ayee, 2008). The unions and associations had the burden of identifying their members and making sure they complied with tax requirements. Being tax compliant granted the associations and unions' legitimacy and protected them from arbitrary harassment by public officials and police. The benefits that can accrue to businesses that register for tax are stated in the Taxpayer Identification Numbering System (TIN) Act 632, 2002. Also, he said that, per the new strategy, businesses cannot get contracts like the supply of goods or provision of services to any of the state owned enterprises (SOEs), district assemblies or any government institution unless that business has obtained a tax clearance certificate from GRA. He added that business enterprises could not also qualify for funds from the state like the Microfinance and Small Loans Centre (MASLOC), and Youth Enterprise Support (YES).

Other strategies that the authority were using to increase voluntary compliance among the small and medium taxpayers included organizing workshops to educate businesses, highlighting benefits of paying taxes for businesses, frequent visiting the premises of businesses, handling tax issues fairly, identifying and registering new businesses for tax, imposing necessary penalties for defaulters and being friendly and welcoming to the various stakeholders.

Conclusion

The results of the study confirm the general perception that tax compliance is generally low in Ghana especially voluntary compliance. The level of compliance is particularly low for small tax payers compared to medium tax payers which confirm the assertion by the GRA and previous studies on the subject matter in other jurisdictions. The results also showed significant difference in tax compliance between small and medium tax payers. The study revealed that morals of the tax payer, tax audits, tax rates, tax costs of compliance are significant determinants of voluntary tax compliance by small and medium tax payers in Ghana. These factors can guide the GRA to improve revenue mobilization through improving tax compliance.

The study finds strong support for the argument that tax compliance costs highly impact tax compliance levels. For this reason, policy developers should endeavor to make the process of complying with tax requirements less complex and less costly. Tax systems should be aimed at reducing the costs associated with complying with the tax laws so that more small and medium tax payers will be motivated to comply because when taxpayers spend little or no income to be able to comply, they will be motivated to comply with the tax laws.

In addition, tax audit was found to also influence tax compliance. Therefore, management and staff of GRA should endeavor to frequent businesses for their records to be audited. This will contribute significantly towards motivating small and medium tax payers in Ghana to comply with their tax obligation in order to avoid any fines and other sanctions that may come as a result of their failure to fully comply with the tax laws in preparing their accounts and deliberately massaging figures to reduce their tax liability.

The study finds that tax rates impact highly on tax compliance, thus there should be moderate rates of taxes for small and medium tax payers. The rates of tax should not be so burdensome that business growth is hampered thereby making evading tax a wise choice. But rather, efforts should be made to promote the growth and sustainability of the small business.

The ethics of business owners has been found to negatively influence tax compliance levels of small and medium tax payers in Ghana. It is therefore recommended that workshops and seminars should be organized for business owners and managers to train them on the need to be tax compliant to improve their perceptions and ethics. Government should also be transparent in their expenditure activities so as to win the confidence of the taxpayers.

Lastly, the various unions and associations that most of these small and medium tax payers belong can be targeted to train and make their members comply with the tax laws. This can be done by highlighting the benefits that can accrue to the various unions or association that small and medium tax payer belong.

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