Tax Compliance Among Self-Employed in Ghana: Do Demographic Characteristics Matter?

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Received 16 June 2011; accepted 6 August 2011

Abstract
The paper investigates the influence of demographic characteristics, specifically gender, age, marital status and education attainment on tax compliance among self-employed in Ghana using survey method. A questionnaire administered to 350 self-employed in Tema Metropolis revealed that female, educated, older and married self-employed in Ghana are less tax non-compliant. The implication is that given the appropriate treatment, more tax could be collected from these groups than their opposite counterpart.

The study therefore recommend that tax authorities should switch their approach to tax administration from a one-size-fits-all enforcement model to a model that builds on the lessons of tax morale that matches the tax authority’s response to that of the regulated individuals (taxpayers), for example tougher sanction or special tax education for low educated, young, unmarried and male self-employed.

Key words: Tax Compliance; Demographics; Taxpayer; Predominance of cash transaction

INTRODUCTION
The problem of tax compliance is as old as tax itself. Characterising and explaining the observed patterns of compliance and ultimately finding ways to improve it, are of obvious importance to the nations around the world in general and developing countries in particular. Governments all over the world need private resources in the form of taxes to undertake developmental projects such as the provision of potable water, good educational facilities and maintenance of law and order. According to Otieku (1992, P. 45), a country cannot experience any meaningful economic growth “without positive stimulus from intelligent governments”. The important role taxes play in economic development cannot therefore be over-emphasised. Government’s aim of achieving economic development would remain a mirage if efforts are not taken to improve tax compliance.

In Ghana, the informal sector and the self-employed account for over 80% of the total employment (GLSS5, 2010). This means any policy aimed at maximising tax collection should target the self-employed. However, developing the appropriate tax system that will effectively rope into the tax net as many self-employed people as possible is always difficult. Even if the appropriate tax policy is formulated, there has always been the difficulty on the part of tax administrators in reaching out to the self-employed which make them highly non-compliant to tax regulations (Thuronyi, 2003). A number of factors have been identified as contributing to the difficulty in taxing the self-employed, which include but not limited to:

Low standard of record keeping: In most developing countries including Ghana, the self-employed are very indifferent to proper record keeping. This practice therefore makes it difficult if not impossible for any proper assessment of income to be determined by the tax
authorities. What accounts for this situation varies. Most self-employed prefer to run their own business without making conscious efforts to employ qualified accountants whose responsibility it is to keep proper records. Some self-employed also intentionally engage in keeping different records based on the needs or uses it would serve.

Predominance of cash transaction: In Ghana, just like other third world countries, the mode of business transaction by the self-employed is mainly on cash basis. The prevalence of cash as the medium of business transactions leaves no evidence of income from such transactions for future confirmation. Braithwaite (2003) found out that the main medium of transacting business among the self-employed is by cash. Tax authorities therefore find it difficult to determine the income of the self-employed on which taxes are imposed.

Lack of voluntary compliance: Voluntary compliance is the hallmark required of taxpayers in every tax system the world over. However, as noted by Thuronyi (2003) there is low tax morale on the part of the self-employed to voluntarily succumb to tax legislation. This thereby calls for some level of enforcement from the government to compel compliance. In most instances however, governments lack the necessary political will to enforce tax laws for fear of losing popularity. For Governments to meet their revenue targets for sustainable economic development there is the need for new compliance approaches to be considered to improve voluntary compliance.

Lack of permanent place of operation: Most of the self-employed do not register with the appropriate authorities before commencing their operations. For the few who do, many fail to provide proper address of their business locations. It is therefore difficult for the tax authorities to identify such people for tax purposes. According to Gill (2003) the lack of permanent place of operation presents one of the daunting issues facing tax administrators, particularly, with respect to the self-employed, as regards taxpayer identification and registration.

In addition to the aforementioned factors, taxpayer demographic characteristics may also influence their perception and orientation towards tax compliance. Gender, age, educational attainment and marital status have document in the literature as tax compliance determinant factors. For example, Torgler and Valev (2007) investigate whether gender matters in the conduct of illegal activities including tax non-compliance. They found that women are significantly less to agree that corruption and cheating on taxes can be justified. Similar conclusions were reached in relation to majority of the studies reviewed by Richardson and Sawyer (2001) and previously by Jackson and Milliron (1986) that female taxpayers were more compliant than their male counterparts. In particular, a detailed study undertaken by Oxley (1993) in New Zealand reported that women were more often compliers in comparison with men and less often tax evaders or tax avoiders.

There are two major theories explaining gender differences in the compliance literature. These according to Torgler, Valinas and Macintyre (2008) are the “realities theory” and the “opportunity theory”. According to the realities theory, gender differences can be attributed to different biological, psychological and experiential realities that lead to different approaches to issues and problems. In contrast, the opportunity theory argument is closely related to traditional economics, suggesting that men and women do not necessarily have different motivations. Instead gender differences can be explained by different external constraints and opportunities faced by men and women.

Richardson and Sawyer (2001) however noted that the compliance gap between males and females appears to be narrowing with the emergence of a more independent, non-traditional generation of women. In a survey of American taxpayers, Hite (1997) focused on the interaction between gender and education. Female respondents with college degrees tended to be more tolerant of non-compliance than females without college degrees.

Age: The research findings of Jackson and Milliron (1986) posit a positive relationship between age and tax compliance, where old self-employed tend to be more compliant than younger ones are. This was later on confirmed by the majority of studies reviewed by Richardson and Sawyer (2001) that examined the age variable and found that older taxpayers tend to be more compliant than younger taxpayers. Devos (2005) and Ritsema, Thomas and Ferrier (2003) also studied the relationship between age and tax compliance, and concluded that age plays a crucial role in compliance, with young taxpayers less compliant than their old counterparts. The researchers of this study identify themselves with the findings of these researchers. This is because older taxpayers would have acquired sufficient assets and would be stable and financially independent, their tax non-compliance will be therefore be lower compared to younger taxpayers who are still active in acquiring wealth and plan strategies such as underreporting and exaggerate deductions to increase their wealth.

However, researchers such as Mason and Calvin (1978), Dubin and Wilde (1988) found a negative relationship between age and non-compliance, where young taxpayers rather tend to be more compliant that their old counterparts. Results of a significant number of studies also found no relationship at all between age and tax compliance, where older taxpayers tend to be more compliant than their old counterparts. In particular, a detailed study undertaken by Oxley (1993) in New Zealand reported that women were
age variable does not extend to all taxpayers. Second, inconsistent definitions of taxpayer non-compliance are employed throughout the research. Third, when age is considered in association with a number of other variables, its effect on taxpayers’ compliance is diluted. Finally, the interaction of age with other compliance variables could be problematic.

Educational qualification: The effect of education on taxpayer compliance is far from conclusion. Both positive and negative relations have been found between education and non-compliance. Wallschutzky (1984) indicated that education is a variable most likely to improve compliance, whereas Beron, Tauchen and Witte (1992) indicated that inconsistent results are produced as education is highly correlated with income level. The reasons for these conflicting findings are varied. First, there can be difficulty in determining which aspect of education is being measured. Comprehensive literature reviews by Lewis (1982) and Richardson and Sawyer (2001) have identified four measures of education namely (i) the general degree of fiscal knowledge, (ii) knowledge involving evasion opportunities, (iii) general education attainment and (iv) specific tax knowledge. These different dimensions may assist in explaining the confusion surrounding the effect that the education variable has on taxpayer compliance.

Correlations between education and other compliance variables may also have contributed to the inconsistent results found. Other compliance variables that have been suggested as having a relationship with education are gender, income level, taxpayers’ perceptions of fairness and detections and sanctions (Jackson and Milliron, 1986).

Marital status: Individual taxpayers who have spouses are found to be more compliant than unmarried taxpayers. This situation could partly be explained by the fact that women turn to be more tax compliant than men (Richardson and Sawyer, 2001). Married women are therefore able to influence their male counterparts to be tax compliant as well.

All these studies were carried out in developed countries, however, this present study depart from previous studies and look at effect of demographic characteristics on tax compliance in developing countries (specifically Ghana). The study contributes to the literature by examining the effect of gender, age, educational qualification and marital status in high moral hazard society on tax compliance.

Using survey approach, we observed high degree of influence of tax compliance to age gender, education and marital status. Female, educated, married and old self-employed are more likely to be tax compliant. The rest of the paper as follow: section two looks at the methodology, Data analysis and discussion of results in section three and four conclude and make recommendations.

1. METHODOLOGY

The research design employed in collecting, analyzing and interpreting the data is the survey strategy. The choice of survey strategy over other research designs such as experimental and casual-comparative was informed by the assertion of Saunders, Lewis, and Thornhill (2007) that survey is an appropriate and common strategy in business and management research. The choice of survey strategy allowed for the collection of large amount of data from the population in a highly economical way. A sample of 350 self-employed was selected from 6,318 self-employed in TMA using simple random sampling technique. This was to give each and every self-employed in the study area equal opportunity to be selected as part of the sample. Again, the use of simple random sampling technique made it possible for the findings of the study to be generalised about the population understudied.

1.1 Data Collection Instrument

Data for the study was collected using questionnaire. Responses to the survey were confidential and participants gave no names. The questionnaire comprised of 31 questions, which respondents answered with the help of 10 research assistants. To ensure easy and timely administration of the questionnaire, all the questionnaire items were closed-ended. The choice of close-ended items was also to ensure easy and quick analysis of the data. A five-point likert scale was used for 6 of the survey questions, whilst a three point likert scale was employed for 30 of the survey questions. Three hundred and fifty questionnaires were administered, but only 267 were responded to, giving a response rate of about 76%. Some of the self-employed included in the sample were just not interested in participating in the study notwithstanding the number of visits made to them (in some cases, about three times).

The validity and reliability of the survey instrument were examined by pre-testing and modification. The Cronbach alpha reliability coefficient obtained was estimated and found to be between 0.96 and 0.77 for the individual scales, indicating that the instrument was reliable.

2. DATA ANALYSIS AND DISCUSSION OF FINDINGS

The primary data collected was analysed with the help of the statistical analysis tool known as the Statistical Product for Services Solutions (SPSS), the data was analysed using frequency distribution tables and cross tabulation.

Table 1 presents the demographic characteristics of the self-employed included in the study.
The findings show from Table 1 that about 68% of the 197 respondents self-employed are females, whilst the remaining 32% are males. It is clear that females dominate the self-employed in the Tema Metropolis. The reason for women dominating the self-employed in the study area could partly be explained by the fact that no premium is placed on women education in Ghana. Women therefore tend to have very low educational and employable skills that would qualify them for employment in the formal sector that requires a much higher level of education. Women therefore resort to self-employment as a source of livelihood or to complement to their husbands’ efforts in providing for their families.

About 75% of the respondents are young people aged 39 or less, whilst about 25% are old people aged over 39 years. This shows that young people dominate the self-employed in the Tema Metropolis. This finding could be attributed to the fact that employment in the formal sector is choked and opportunities to employ more young persons are lacking. These young persons resort to petty trading as an alternative employment avenue as a source of livelihood. Again not much capital is required to enter trading as an alternative employment avenue as a source of livelihood or to complement to their husbands’ efforts in providing for their families.

About 93% of the self-employed respondents have a low level education (i.e. up to secondary and or technical education). The remaining 7% of the self-employed respondents have high level of education (i.e. those pass secondary education such as Teachers certificate A, diplomas and university degrees). From the analysis, most of the self-employed have low educational level.

Higher levels of educational attainment may play an important requirement in the labour market with high educational qualifications serving to secure employment in the formal sector. In fact, a requirement for most job vacancies in the formal sector requires at least diploma qualifications and in some cases, a number of years of working experience. These may partly account for the reasons why most of the self-employed understudied have low educational level.

About 57% of the self-employed surveyed are married whilst the remaining 43% are not married. This indicates that married taxpayers dominate the self-employment sector in the study area. There is the probability of intra-couple risk pooling with a husband’s primary employment increasing the probability that a wife will be observed in self-employment. Self-employment comparatively provides flexible working time than employment in the formal sector. Most married couples may decide that one of them (usually, the husband) works in the formal sector while the wife becomes self-employed. This arrangement could then afford wives ample time to take care of their children as well as take good care of their homes, which is a requirement of a virtuous wife, particularly in the Ghanaian setting.

The understudied demographic variables, namely gender, age, educational level and marital status will now further be interrogated to find their effect on compliance.

### 2.1 Effect of Gender on Income Tax Compliance

The effect of gender on tax compliance was also investigated. Respondents who have ever filed tax returns were considered as low non-compliant, whiles respondents who have never filed returns were considered high non-compliant.

From Table 2, about 9% of the male respondents were low non-compliant as against about 16% of female respondents. Again, about 91% of the male respondents were high non-compliant as against 84% of female respondents. It is therefore evident that female self-employed are more compliant with income tax laws than their male counterparts are.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Have you ever filed returns?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Male</td>
<td>8</td>
<td>77</td>
</tr>
<tr>
<td>Female</td>
<td>29</td>
<td>153</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>% within gender</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>9.4</td>
<td>100</td>
</tr>
<tr>
<td>Female</td>
<td>15.9</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Survey (2010)

This finding confirms the conclusions of Torgler and Valev (2007), Richardson and Sawyer (2001), and Jackson and Milliron (1986) that female taxpayers are more compliant than their male counterparts are. Females
by nature are submissive and this quality is displayed in every sphere of their life including complying with income tax laws. Males on the other hand are generally risk loving and deviants and exhibit this quality in every aspect of life including compliance with income tax laws.

2.2 Effect of Age on Income Tax Compliance

The effect of age has also been investigated in numerous tax compliance literatures. Survey questions two (2) and thirteen (13) were cross-tabulated to determine the effect of age on income tax compliance by the self-employed. The responses obtained were summarized in Table 3. Respondents aged up to thirty-nine years were considered as young persons, while respondents aged above thirty-nine considered as old persons.

From Table 3, about 21% of the older respondents fall into the category of low non-compliers against 11% of the young respondent self-employed. Again, about 79% of the old respondents self-employed fall into the category of high non-compliers, whilst about 89% of the young respondents self-employed fall into the category of high non-compliers. This result shows that old persons are more compliant with income tax laws than their young counterparts are.

| Table 3 Effect of Age on Income Tax Compliance |

<table>
<thead>
<tr>
<th>Age</th>
<th>Have you ever filed returns?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Young</td>
<td>23</td>
<td>178</td>
</tr>
<tr>
<td>Old</td>
<td>1.40</td>
<td>88.60</td>
</tr>
<tr>
<td>% within age</td>
<td>21.2</td>
<td>78.8</td>
</tr>
</tbody>
</table>

Source: Field Survey (2010)

The finding of this study does not support that of Porcano (1988), Feinstein (1991), Mason and Calvin (1978), Dubin and Wilde (1985) whose works found no relationship between age and non-compliance. However, this finding confirms the works of Richardson and Sawyer (2001) that examined age variable and found that older taxpayers tended to be more compliant than younger taxpayers were.

2.3 Effect of Educational Level on Income Tax Compliance

Survey questions three (3) and thirteen (13) were cross-tabulated to establish the effect of educational level on income tax compliance among the self-employed. Respondents with no educational qualification through to secondary or technical education were considered as having low educational level, whilst those with qualifications ranging from diploma through to university degrees were considered as having high educational level.

Table 4 Effect of Educational Level on Income Tax Compliance

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Have you ever filed returns?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Low</td>
<td>24</td>
<td>224</td>
</tr>
<tr>
<td>% within Qualification</td>
<td>9.8</td>
<td>90.2</td>
</tr>
<tr>
<td>High</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>% within Qualification</td>
<td>64.3</td>
<td>35.7</td>
</tr>
</tbody>
</table>

Source: Field Survey (2010)

From Table 4, respondents with high educational level had about 64% being low non-compliant as against about 10% of those considered as having low educational level. On the other hand, whilst about 36% of respondents with high level of education were high non-compliance, as much as about 90% of their counterparts with low level of education were high non-compliance. This indicates that respondents with high educational level are more compliant with income tax laws than their counterparts with low educational levels.

This finding is in sharp contrast with that of Beron, Tauchen and Witte (1992) that indicated that there is no correlation between levels of education and tax compliance. However, this finding confirms the conclusions reached by Wallschutzky (1994) that indicated that education is a variable most likely to improve compliance. As individuals climb higher on the academic ladder, they are educated on a number of social and economic issues, including the need and essence to honour one’s tax liabilities to the state. This may partly account for the reasons why the self-employed with high levels of education tend to be more compliant with income tax laws than those with low level of education.

2.4 Effect of Marital Status on Income Tax Compliance

Survey questions four (4) and thirteen (13) were cross-tabulated to determine the effect of marital status of the self-employed on income tax compliance.

Table 5 Effect of Marital Status on Income Tax Compliance

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Have you ever filed returns?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
<td>26</td>
<td>126</td>
</tr>
<tr>
<td>% within m. Status</td>
<td>17</td>
<td>83</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>104</td>
</tr>
<tr>
<td>% within m. Status</td>
<td>9.4</td>
<td>90.6</td>
</tr>
</tbody>
</table>

Source: Field Survey (2010)

As Table 5 depicts, 17% of the married respondents were in the low non-compliant category as against about 9% of the unmarried respondent self-employed. On the other hand, 83% of the married respondent self-employed
were high non-compliant as against about 91% of the unmarried respondent self-employed. This indicates that married self-employed are more compliant with income tax laws than their unmarried counterparts. The reasons for this revelation could be attributed to the fact that females are more compliant with income tax laws and could therefore exert more influence in the decision to comply with income tax laws. The finding of this study confirms that of Richardson and Sawyer (2001) who concluded that married taxpayers are more compliant than unmarried taxpayers.

**CONCLUSION AND RECOMMENDATION**

The primary objective of this study is to determine which income tax enforcement strategy should be embarked upon to elicit maximum compliance from the self-employed. Specifically, the study looked at some demographic characteristics of the self-employed and how these characteristics influence income tax compliance.

The demographic characteristics investigated are gender, age, educational level and marital status. The following conclusions are drawn from the study. Female self-employed are more compliant with income tax laws than their male counterparts. This study again shows that old persons are more compliant with income tax laws than their young counterparts. The self-employed with high educational level are more compliant with income tax laws than their counterparts with low educational levels are. Married self-employed are more compliant with income tax laws than their unmarried counterparts.

The study recommends that tax authorities should switch their approach to tax administration from a one-size-fits-all enforcement model to a model that builds on the lessons of tax morale that matches the tax authority’s response to that of the regulated individuals (taxpayers), for example tougher sanction or special tax education for response to that of the regulated individuals (taxpayers), the lessons of tax morale that matches the tax authority’s size-fits-all enforcement model to a model that builds on switch their approach to tax administration from a one-

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