A Comparative Study of Compliant and Non- Compliant Individual Taxpayers in Ethiopia evidence from *Amhara region*

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Abstract
The tax compliance literature indicates that many factors, including, economic, social, psychological and demographic, impact upon the compliance behaviour of taxpayers. This research study investigated the relationship if any, that exists between major tax compliance variables and the attitudes and behaviour of both selected individual taxpayers' and tax evaders' towards tax evasion in Ethiopia, Amhara region. The study employed a mixed method approach drawing data from both a survey instrument and taxpayer interviews. The findings revealed that tax morals, tax fairness and to a lesser degree tax enforcement and tax awareness both directly and indirectly impacted upon taxpayer compliance. It is envisaged that the results of this study provide useful information for revenue collecting authorities and have implications for tax policy development.
Keywords. Compliant, Non- Compliant, Taxpayers, Ethiopia

Chapter one: Introduction

An important issue for any government and revenue collecting authority is to obtain knowledge and understanding of the reasons for taxpayer non-compliance. However, measurement of the magnitude of intentional and unintentional non-compliance can be difficult as it involves estimating levels of uncollected tax, which by its nature is not detected by the revenue authority. The amount of tax lost through evasion is potentially enormous particularly in developing countries like Ethiopia. Consequently to prevent the erosion of government revenue, further research is required into understanding taxpayer attitudes and behaviour.

There are two broad schools of thought regarding taxpayer compliance which emerge from the literature. The first is studies based around the theory of economics that explain the change in taxpayer compliance. The second is studies based on theories of psychology and sociology that explain the varying levels of taxpayer compliance. The focus of this study will primarily be on a few compliance variables, which have been predominant throughout the review of the literature. They are the economic variable of deterrence which includes (the likelihood of being caught and the range of penalties applied to those who are caught) and the psychology and sociology variables of moral values and the perceptions of fairness held by taxpayers and their general tax awareness. These particular compliance variables have been critical in influencing taxpayer behavior, thereby justifying their examination.

Logic suggests that the most efficient way to design an affective taxpayer compliance program would be to concentrate on the factors that appear to have the most impact on compliance levels. Of all the variables examined by scholars, deterrence, equity and moral values have been critical and accordingly the focus of this study is primarily on these factors. This study also expands upon a prior study conducted by other researchers that also investigated the attitudes and behaviours of both compliant and non-compliant individual taxpayers. However, those studies making an original contribution to the literature regarding tax evaders was based on data that had been recorded within government reports. The present study gathers data that has been directly sourced from the tax evaders themselves increasing both the validity and reliability of the data while making a more recent contribution to this area of research particularly in Amhara region.

Chapter Two: Literature Review

The following comprises a review of past studies which have examined tax evasion/non-compliance and employed similar compliance variables.

Penalties

Researchers have found that taxpayers are more sensitive to the magnitude of the penalty than to the probability of detection when the probability is very low (i.e. 4 % or less) (Jackson, and Jones, 1985). This could have implications for countries that have moved to a self-assessment environment. A study by Witte and Woodbury (1983) observed that there was a significant relationship between the severity of the criminal sanctions and compliance by one group of taxpayers (high-income self-employed individuals). Within each of the groups this study covered, legal sanctions were most effective for the higher class and the better educated (not the best). This study did indicate however, that the threat of guilt feelings was a greater deterrent to tax evasion than the threats or stigma of legal sanctions. This finding has been supported by similar work on sanctions (Schwartz, & Orleans

1967). However, the positive effect of increased sanction levels on taxpayer compliance has been found even where relatively low (and realistic) penalty levels are used (Carnes and Eglebrecht 1995). What is of major concern though has been that taxpayers' perceptions of the true penalty levels are higher than what the penalties actually are. This has tended to skew research findings. Other research evidence suggested that a tax system that combines both penalties and rewards is more effective in maximizing compliance than a system that focuses solely on sanctions (Falkinger and Walther 1991). Consequently, positive inducements for compliance may also have a key role to play and should be subject to further investigation.

Enforcement/Detection

On the other hand, studies of criminal behaviour in general have found that the probability of apprehension is more important than the sanctions actually imposed (Title and Login 1973). Alternatively, another influence may just be the precision of information regarding the probability that punishment will be imposed. Consequently, vague information about the relatively low probability of detection and punishment enhances a low deterrent value (Friedland 1982).

Overall the economic deterrence model proposes that increasing punishment by expanding criminal sanctions decreases non-compliance and this principle supports sentencing theory and the courts' right to consider the maximum penalty for an offence in order to achieve general deterrence (Jackson and Milliron 1986). However, this model in its purist form falls short and has been criticised for failing to consider the analysis of attitudes, perceptions and moral judgements on tax behaviour (Lewis 1982). Consequently while economic deterrence models are relevant in shaping compliance behaviour other 'behavioural' factors have also been found to influence compliance decisions (McKerchar 2003).

Tax Awareness

From a tax administration viewpoint, other researchers (Cialdini 1989) have concluded that compliance could also be influenced, by educating taxpayers of their social responsibility to pay and thus their intension would be to comply. Schmolders (1959) suggests as a behavioural problem, tax compliance depends on the cooperation of the public. Another study by Hite (1997) also found that there are greater gains in assisting compliant taxpayers to meet their fiscal obligations rather than spending more resources pursuing the minority of non-compliers. Assisting taxpayers by improving the flow and quality of information or educating them (e.g. TV campaigns) into becoming more responsible citizens has the potential to yield greater revenue rather than if it were spent on enforcement activities. For instance, some researchers (Hasseldine, Hite, James and Toumi 2007) have found that carefully tailored persuasive communication strategies can in the short–term also have a positive effective on taxpayer reporting. Likewise it is evident that in Ethiopia the revenue authorities support taxpayers through a range of easily accessible explanatory leaflets and provide a useful site on the internet. Undertaking these courses of action has had the desired effect of improving taxpayer relations and consequently voluntary compliance.

The work of Hite (1997) also suggests that both gender and education generally impact upon taxpayer compliance. Hite points to an example of where in reducing the amount of litter in America, instead of the authorities increasing penalties, the real improvement came when there was the slogan uplifted to "Keep America Beautiful." Although Hite's study provided evidence of the impact of these demographic variables upon compliance behaviour, other studies have found it difficult to find direct associations between compliance and demographic variables. Nevertheless, this area continues to be an active area of research within taxpayer compliance. A further study conducted by Coleman and Wilkins (2001) revealed that there was a diversity of opinion and attitudes towards the tax system and compliance issues amongst the Australian public. One of the likely factors that could impede attitude change is the uneven level of comprehension or involvement in the tax system. This raises the issue of tax knowledge/awareness and the impact of this variable in improving overall taxpayer compliance. Evidence regarding the importance of education in improving voluntary compliance in Malaysia and the impact of tax knowledge during the introduction of self- assessment there, was evidenced in a study by Loo Ern Chen (2006). A study by Kornhauser (2007) also supports the notion that educational efforts aimed at all segments of the population can improve taxpayer knowledge which in turn influences voluntary compliance.

Tax Fairness

Other social and psychology studies have found that the fairness and equity of a tax system also impacts upon compliance levels (Tan 1998). In particular, the notion of "exchange equity" (where taxpayers believe they are not receiving the benefits from the government in exchange for taxes paid) can affect compliance. Although tax fairness is only one factor in achieving overall compliance, the government of Ethiopia for example, has continuously placed great emphasis on this criterion. In terms of having greater impact, the argument is that a fairer tax system will improve voluntary compliance. Consequently, fiscal psychologists, maintain that a

taxpayer's belief in the tax system rather than the penalty structure is more salient in generating compliance.

Another study which found a link between taxpayers' perceptions of fairness and tax compliance behaviour in Hong Kong was conducted by Richardson (2006). Previously, Spicer (1974) found a significant association between fairness and tax evasion while Song and Yarbrough's (1978) study discovered a significant association with 75% of the subjects stating that the ability to pay was more significant than the benefits. Hite and Roberts (1992) found that most taxpayers thought that mildly progressive tax rates were the most fair and further that tax fairness was significantly associated with perceptions of an improved tax system, concluding that tax fairness and tax evasion were related. Chan, Troutman and O'Bryan (2000) also found that taxpayer attitudes (fairness) had a positive relationship with tax compliance in both Hong Kong and the United States of America. A related issue to fairness was that of procedural justice which was discovered in a major Australian study conducted by Murphy (2003) into mass marketed scheme investors. The unfair treatment of taxpayers by the ATO in that particular case was found to be detrimental to their future compliance attitudes.

On the other hand, other studies have found no association between tax fairness perceptions and tax compliance behaviour. (Vogel 1974; Porcano 1988 and Antonides and Robben, 1995). A creditable reason for the inconsistency as suggested by Jackson and Milliron (1986) and Richardson and Sawyer (2001) is the multi-dimensional nature of tax fairness as a tax compliance variable. However, despite the inconsistent findings of various researchers, it is widely acknowledged that demographic variables, such as, age, gender, marital status, education, culture and occupation have an effect upon fairness perceptions which ultimately impacts upon compliance.

Tax Morals

Other social psychology studies have also examined the impact of moral values upon taxpayer compliance. Indeed, much of the empirical work that has been carried out by social researchers in this area tends to refute the economic model of compliance (that is that taxpayers are utility maximizing creatures that only weigh up the expected costs of non-compliance against the potential gains) in its basic form. For example, it has been demonstrated by means of laboratory experiments (Alm, Sanchez and De Juan 1995) that, even where the deterrence factor is so low that evasion makes obvious economic sense, some individuals will nevertheless comply. Consequently where random audits exist or where it is planned that only a small percentage of returns are selected for audit, a purely rational taxpayer would still be able to virtually discount audit as a serious deterrent factor (Pilkington 1988).

It is in this environment that it has been found that some taxpayers nevertheless comply due to their high tax morals and values and consequently this becomes an important variable to investigate. Studies that have investigated tax morale have found that higher legitimacy for political institutions has led to higher tax morale (Torgler and Schneider 2007). This was further evidenced in a study of 30 developed and developing countries that tax morale and compliance is highest in the countries characterised by high control of corruption and low size of bureaucracy (Picur and Riahi-Belkaoui 2006). A recommendation was also made by Kornhauser (2007) to the IRS (Inland Revenue Service) that they endorse a tax morale approach to compliance that recognised the varying attitudes and behaviours of taxpayers.

However, Niemirowski, Baldwin and Wearing (2001), found overall that the results of tax evasion behavioural research over the last thirty years has remained contradictory and inconclusive. The researchers indicated that this was mainly due to the research addressing only a few variables at a time. The authors concluded that despite extensive research there was still a lack of consistent reliable predicators or explanations of the causality of tax evasion. Consequently, given that tax evasion occurs for a variety of reasons and that there are a number of factors which influence it, it would be naive to think that analysing a few compliance variables alone as in this study, would produce all the answers. For instance, an analysis of mediating factors such as demographic variables and other descriptive and definitional issues were beyond the scope of this current analysis. Instead this study investigates the relationship that exists, if any, between selected tax compliance variables and the attitudes and behaviour of Australian individual taxpayers. In particular, the focus was on whether there was a link between the affect and impact of perceived and actual penalties upon taxpayers' compliance decisions.

Chapter Three: Research Methodology
3.1 Objective of the study
The overall objective of the study is to examine if a relationship exists between a number of selected tax compliance variables discussed above (excluding demographic variables) and the attitudes and behaviour of individual taxpayers (both compliant and non-compliant). As indicated, the selected compliance variables of interest in this study comprise; fairness/equity of the tax system, the moral values of taxpayers,' deterrence mechanisms such as, penalties, detection and law enforcement measures and taxpayers' general tax awareness. Consequently the purpose of this research is also to further elicit the reasons for taxpayer non-compliance and reveal some of the motives of tax evaders.

Admittedly in conducting research into taxpayer compliance, there are clearly many factors at play. Consequently, it should be initially acknowledged that other factors, such as, complexity of the tax legislation, audit rates, tax rates and the opportunities for evasion, also impact upon compliance levels but are outside the scope of this study. Nevertheless, some indirect evidence of these other compliance factors has been discovered throughout the study.

In particular, the research will focus on the impact of penalties and sanctions as a key determinant upon taxpayer behaviour. The link between taxpayers' attitudes towards penalties and their consequential attitude towards evasion/non-compliant behaviour is one which has been subject of considerable research in the past (Grasmick and Scott 1982; Hassledine and Kaplan 1992 and Kinsey 1988). The study of penalties is important given that it is also one of the factors which are within the control of tax authorities. An emphasis in the study was placed on how taxpayers' felt penalties impacted as a deterrent measure and the appropriate use of penalties by the revenue authorities. Allowing for some expected inbuilt bias given a cohort of tax evaders being investigated, the study nevertheless provides information gathered from this alternative viewpoint and makes an original contribution to the existing literature in this regard.

3.2 Research Questions/Hypothesis

As indicated earlier the major attitudinal variables of interest in this study comprise fairness/equity of the tax system, the moral values of taxpayers' and deterrence mechanisms such as penalties and law enforcement measures. The possible relationship between these variables and taxpayer's compliance attitudes/behaviours was considered in the context of six main research questions and hypothesis which are described as follow:

1. Is there a relationship between taxpayers' perceptions of tax penalties and sanctions and their tax compliance attitudes/behaviour?
    H1: There is a relationship between taxpayers' perceptions of tax penalties and sanctions and their tax compliance attitudes/behaviour.

2: Is there a relationship between taxpayers' perception of tax fairness and their tax compliance attitudes/behaviour?
    H2: There is a relationship between taxpayers' perception of tax fairness and their tax compliance attitudes/behaviour.

3: Is there a relationship between taxpayers' tax morals and their tax compliance attitudes/behaviour?
    H3: There is a relationship between taxpayers' tax morals and their tax compliance attitudes/behaviour.

4: Is there a relationship between taxpayers' perception of tax law enforcement by the revenue authorities and their tax compliance behaviour?
    H4: There is a relationship between taxpayers' perception of tax law enforcement by the revenue authorities and their tax compliance attitudes/behaviour.

5: Is there a relationship between taxpayers' perception of the probability of detection by the revenue authorities and their tax compliance attitudes/behaviour?
    H5: There is a relationship between taxpayers' perception of the probability of detection by the revenue authorities and their tax compliance attitudes/behaviour

6: Is there a relationship between taxpayer's tax awareness and their tax compliance attitudes/behaviour?
    H6: There is a relationship between taxpayers' tax awareness and their tax compliance attitudes/behaviour.

3.3 The Survey Instrument

The survey instrument comprised six sections including 30 questions, of which there were many parts to most questions and a space at the end for comments. The six areas covered included, general tax awareness, penalties and deterrence, tax law enforcement, tax fairness, tax morals and finally demographic details. In most cases a seven point liket scale was used with scales ranging from strongly agree (7) to strongly disagree (1) and moderate scores found in between the two extremes. (Ajzen & Fishbein 1980) argued that a number of studies administered on different occasions provide evidence that the standard attitude scales are highly reliable in measuring the strength of beliefs and intentions. In particular Ajzen and Fishbein have cited other studies, Czaja and Blair (1996) which reported test-retest reliability greater than 0.95 for the "likely –unlikely scale."

3.4 The Survey Sample and Interviews

Fowler (1993) indicated that a sample of 150 people would describe a population of 15,000 or 15 million with virtually the same degree of accuracy. On this basis, it was determined that, some where between 150-300 usable responses for each group (evader and non-evader) would be desirable for this study given the taxpaying population in Ethiopia, Amhara region.

A mail-out version of the survey was conducted for a random selection of personal taxpayers labeled the evader group (i.e. non-compliant taxpayers). The sample frame was to be those personal taxpayers that, according to the taxation office records, had lodged tax returns for three previous income tax years, including 2004, 2005 and

2006 (these were the most current years at the time of conducting the field work) and had been audited and subjected to a penalty. In accordance with the researcher's specifications, tax evaders were randomly selected based on the following criteria; age, gender, marital status, agent prepared or not, location, occupation and the level of income, all of which could be determined from their tax returns. The other important demographic variables relevant to this study which were indirectly identified were the educational level of those taxpayers given their occupational groups, nationality based on residence and also that they had lodged tax returns in the previous and current year.

The sample population was 700 records for this evader group. Given an expected response rate of 25 to 30 per cent, this number would result in a sample size of at least 150 to 200 respondents which would be sufficient in terms of the credibility of the results. Names and addresses of those selected were only known to the tax office. Understandably due to the privacy provisions, the tax office was not willing to allow the researcher direct access to taxpayers' details. To satisfy this condition the surveys were supplied by the researcher to the tax office who conducted the distribution of the surveys to the evader sample. The survey responses were then received by the researcher directly. Such an approach maintained taxpayers' privacy in that neither the researcher, nor the tax office, could match taxpayers' details to completed surveys. As the study was conducted in conjunction with the tax office, it was considered that this approach would also improve response rates. The actual response rate received for this study was about 29%). Other previous tax compliance studies indicate that a response rate of anything between 25% to 30% is acceptable in tax surveys, Murphy (2003). It was considered that the findings derived from these interviews would complement and cross validate the results from the survey component of the research study.

Given the required selection criteria (i.e. specific demographics that were representative of the taxpaying population in the region) the researcher was able to select a sample of 300 personal taxpayers labeled as non-evaders (i.e. compliant taxpayers). That is, it was assumed that there were no tax evaders in this group, given the likelihood of this occurring being very small. Every person on the data base of the company also had the same probability of being selected given the cross section of taxpayers required for the sample. This sample was generally representative of the population according to figures released by the Amhara Bureau of Statistics. Taxpayer privacy was maintained at all times, as no names or address were released to the researcher given it was an anonymous survey. A small group of taxpayers who had participated in the survey were contacted directly and also happy to be interviewed in person.

3.5 Selected Statistical Tests
Specifically in terms of an exploratory analysis and giving a snapshot of the data gathered, it was considered that employing chi-square tests was appropriate to explore the relationship between various categorical variables (i.e. compliance behaviour against perceived tax penalties, tax fairness, tax law enforcement, tax morals and tax awareness – excluding demographics). Chi-square, as a non-parametric technique is ideal for situations where data are measured on nominal (categorical) scales and also where sample sizes are relatively small Pallant (2005), as was the case here. Chi-square is also a fairly robust test that does not have such stringent requirements and does not make assumptions about the underlying population distribution. To extend the quantitative component of the study, logistic regression was also employed to make the overall analysis more rigorous and improve the validity of results.

Initially, for the purpose of the preliminary analysis the chi-square statistical test was chosen to investigate the effect of selected survey questions upon compliance behaviour. Specifically, survey questions two, four, eleven, twelve, fifteen and seventeen (independent variables) were statistically analysed in the study against question seven (dependent variable), compliance behaviour. These questions represented the thrust of the study in terms of; tax penalties for non-compliance, taxpayers' awareness, law enforcement, tax morals and tax fairness. The variables employed were tested for statistical significance at the 5 per cent level. (i.e. statistically significant at p ~ 0.05) Cross tabulation (SPSS output) of the chi-square results was examined to determine the relationship between the dependent and independent variables while the frequencies and percentage breakdown of responses to selected questions was also examined to enable comparisons with other studies.

Chapter Four: Data Presentation and Analysis
4.1 Research Results
From the combined findings matrix (Table 1 below) the areas of convergence and divergence with respect to the research questions and hypotheses posed under both the quantitative and qualitative components of the study for the evader sample can be identified as follows.

Table1: Combined Findings Matrix- Evader Sample

Primary Research Question/Hypotheses	Quantitative Component		Qualitative Component	
	Chi-square tests results	Regression results	Survey Comments	Interview Findings
Q1. Penalties	√ (qualified yes) (qualified yes)	√ (qualified yes)	x	√ (qualified yes)
H1. Penalties	√ (accepted in part) part)	√ (accepted in part) part)	N/A	N/A
Q2. Fairness*	√	___	√	√
H2. Fairness	√	____	N/A	N/A
Q3 .Morals*	√	√	√	√ (qualified yes)
H3. Morals	√	√	N/A	N/A
Q4. Enforcement Enforcement*	√ (qualified yes)	√	√	√ (qualified yes)
H4. Enforcement	√ (accepted in part) part)	√	N/A	N/A
Q5.Probability of Detection	x	√ (qualified yes)	x	x
H5.Probability of Detection	x	√(accepted in part) part)	N/A	N/A
Q6.Tax Awareness	√(qualified yes) yes)	____	√ (qualified yes) yes)	√(qualified yes) yes)
H6.Tax Awareness	√(accepted in part) part)	____	N/A	N/A

Source*:* Survey data (2014)

N/A - Qualitative data analysis does not test hypothesis.* Significant results

It is evident that the perception of fairness of the tax system was clearly influential upon the compliance attitudes and behaviours of non-compliant taxpayers. Despite the absence of regression results, this was supported by the chi-square test results and comments both in the survey and at interview. Some taxpayers even admitted that it was the issue of fairness that had lead them to partake in their non-compliant actions. There are many different facets of fairness which could have been compromised because of the tax system.

To a slightly lesser degree the issue of tax morals also indicated converging and complementary results with respect to chi-square tests and survey comments. The regression results and interview findings produced some qualifications, however given that the cohort of taxpayers investigated were those who were found to be non-compliant, this qualification is not unexpected. Significant factors such as, self-assessment, competitive pressures and a vibrant cash economy nevertheless impacted upon taxpayers' morals and their consequential compliance behaviour.

An examination of Table 1 above also reveals that tax law enforcement was a factor upon the taxpayers' compliance behaviour. Other than receiving qualifications under both the chi-square tests and at interview, the factor was found to be influential. In this respect there was a clear distinction made by taxpayers between negative and positive enforcement with the latter being preferable. The reason for this became obvious from the interview comments where all evaders indicated that the harsh treatment in an audit was undesirable.

However, there was also evidence of a divergence in results regarding other forms of deterrent by way of penalty and the probability of detection. Specifically other than some qualified support at interview and statistical tests, penalties were generally viewed as being ineffective in influencing compliance behaviour. There was no authoritative support that an introduction or increase in penalties would lead to improved compliance on its own. The results suggested rather, that penalties ought to be used in combination with other factors, such as, taxpayer education and services, in order to improve compliance.

While there were some mixed results reported the general perception of tax evaders was that the probability of detection did not influence compliance behaviour. Other than qualified support from the regression results, tax evaders were of the belief that audit rates and coverage was poor citing the cash economy as a visual example. Accordingly taxpayers who perceived the probability of detection as low were also non-compliant. Finally, some convergence in results was discovered for tax awareness and its impact upon compliance. However, there were no findings under the regression analysis and survey comments were inconclusive with regards to this factor. Where chi-square test results indicated that poor tax awareness results in negative compliance behaviour, this was not totally supported by interview findings. In fact it was clear from the interviews that taxpayers did

possess general tax awareness with respect to tax avoidance/evasion distinction and evasion opportunities. A possible explanation for the divergence is that the statistical tests were not able to differentiate between the subtle differences in tax awareness/knowledge.

Table 2: Combined Findings Matrix-General population sample

Primary Research Question/ Hypotheses	Quantitative Component		Qualitative Component
	Chi-square tests results	Regression results	Interview Findings
Q1 Penalties*	√	√ (qualified yes)	√ (qualified yes)
H1 Penalties	√	√ (accepted in part)	N/A
Q2 Fairness	x	___	√ (qualified yes)
H2 Fairness	x	____	N/A
Q3 Morals*	√	____	√
H3 Morals*	√	____	N/A
Q4 Enforcement	x	____	√ (qualified yes)
H4 Enforcement	x	____	N/A
Q5 Probability of Detection	x	√ (qualified yes)	√ (qualified yes)
H5 Probability of Detection	x	√ (accepted in part)	N/A
Q6 Tax Awareness*	√ (qualified yes)	√	√ (qualified yes)
H6 Tax Awareness	√ (accepted in part)	√	N/A

It is evident from an examination of the combined findings matrix (Table 2) above that there was a convergence and gathering of similar results under the penalties head. Along with qualified support from the interview findings and regression results, there was strong support from the chi-square tests. Overall there appears to be a general consensus amongst this group of taxpayers that penalties (including severe penalties –imprisonment) can be influential upon compliance behavior.

The perception of fairness of the tax system did not appear to have a significant impact upon compliance behavior in the general population sample, as shown by the divergence of results in Table 2. While there was an absence of regression results, only qualified support at interview indicated that there was any relationship between fairness and compliance behavior. Again the many different facets of fairness may have also lead to the divergence of the results and lack of evidence. There appears to be clear support for a relationship between compliance behaviour and tax morals. Despite the absence of regression results, positive complementary results can be found in both the chi-square tests and interview findings. Taking peoples' views on face value is always difficult but consistent with the majority of the tax complying population, tax morals were found to be generally of a high standard. In contrast an examination of Table 2 reveals that tax law enforcement was not generally influential upon compliance behavior. Other than some qualified support at interview there was no evidence to suggest that enforcement whether positive or negative would have any impact upon compliance levels.

There was some convergence in the results for the probability of detection, where qualified support was discovered in both the regression tests and through the interview findings, of this variable having some influence upon tax compliance behaviour. Despite admitting to low audit and collection rates, compliant taxpayers generally felt that detection was possible. Overall there was some convergence of results with respect to tax awareness and compliance behaviour, particularly with respect to the regression results and interview findings. This was opposite to the finding of those in the evader group. Tax awareness of both general and specific tax issues was evident despite statistical tests failing to pick up some of the subtle differences in tax awareness/knowledge. Overall, compliant taxpayers were found to generally have a good understanding of the tax issues raised.

4.2 Summary and Conclusions
> **Findings from Non-compliant Taxpayers**

Consequently, based on the findings of the two components of the research, the following conclusions can be drawn with respect to the research questions posed to non-compliant taxpayers. A clear result from the research is that perceptions of tax fairness did impact upon the behaviour of non-compliant taxpayers,' confirming a positive response to question 2 and accepting hypothesis 2. This finding is consistent with the findings of other studies regarding the impact of fairness perceptions upon compliance behaviour.

The tax morals of non-compliant taxpayers were also influential upon their behaviour according to the survey results, but were more qualified with respect to the interviews. This is not surprising given the cohort of taxpayers examined but taken on face value these findings are supported by the literature. These taxpayers fell

into the category of intrinsic taxpayers, where their weaker tax values and morals influenced their non-compliant behaviour. Overall on balance, the answer to research question 3 was positive and hypothesis 3 was accepted.

With regards to enforcement, overall the results indicated to a lesser degree that it was influential upon the behaviour of non-compliant taxpayers. In particular, ineffective enforcement by the tax office to tackle the cash economy and offshore evasion was found to be a factor upon voluntary compliance. Other studies have reported similar findings with respect to this factor. Consequently, research question 3 was confirmed and hypothesis 4 accepted.

Following on from the issue of enforcement is the issue of the probability of detection. Results were generally negative and overall it appeared that taxpayers felt there to be a low probability of detection. This will be of a concern to the tax office who perceives the audit function as a vital component of the self- assessment system as evidenced in prior studies. Consequently the answer to research question 5 was no while hypothesis 5 was rejected.

It was evident from the findings that penalties were generally viewed as being somewhat ineffective in influencing compliance behaviour. For example, although a specific deterrent may have been achieved for non-compliant taxpayers, the general deterrent effect of penalties was inconclusive. Likewise, results suggest that penalties should be used in combination with other measures such as taxpayer education and services, (as a preferred penalty) in order to achieve greater compliance. Consequently, the answer to research question 1 was a qualified yes while hypothesis 1 was accepted in part.

Finally with respect to tax awareness/knowledge it was evident that taxpayers possessed some basic tax knowledge although it was inconclusive as to whether it impacted upon their compliance behaviour. What was clear in interviews, was that this cohort of taxpayers,’ were aware of the tax evasion/tax avoidance distinction and were willing to push the boundaries of the law as has been discovered in prior studies. Consequently, research question 6 was a qualified yes while hypothesis 6 was accepted in part.

> **Findings from Complaint Taxpayers**

Based on the findings of the two components of the research the following conclusions can be drawn with respect to the research questions posed to compliant taxpayers. It is clear from the study that the perceptions of tax fairness did not impact upon the behaviour of compliant taxpayers,’ resulting in a negative response to research question 2 and rejecting hypothesis 2. This finding is inconsistent with the findings of other studies regarding the impact of fairness perceptions upon compliance behaviour.

In contrast, the tax morals of compliant taxpayers were generally influential upon their behaviour according to chi-square statistical tests and interview findings. This result is consistent with the literature and was expected. Compliant taxpayers also fall into the category of intrinsic taxpayers who can be persuaded by institutional factors. However, their stronger tax values and morals were more likely to influence their compliant behaviour than external factors. Overall the answer to research question 3 was positive and hypothesis 3 was accepted.

The results also indicated that enforcement was not influential upon the behaviour of compliant taxpayers. Similar to evaders, ineffective enforcement by the tax authority to tackle the cash economy and offshore evasion was found to be a factor upon voluntary compliance. Other studies have reported similar findings. Overall, the answer to research question 4 was negative and hypothesis 4 was rejected.

Following on from the issue of enforcement is the issue of the probability of detection. The results varied across the different research components indicating that compliant taxpayers believed that detection was possible with some reservations. Consequently, the answer to research question 5 was a qualified yes while hypothesis 5 was accepted in part. With the focus of this study upon the penalties for non-compliance, it was evident from the findings that penalties were generally viewed as being effective in influencing taxpayer behaviour in the general population. However, this was qualified at interviews to some degree as other deterrent measures such as taxpayer education and services, were also suggested ought to be used in combination with penalties in order to achieve greater compliance. Overall, the answer to research question 1 was yes and hypothesis 1 was accepted.

Finally, with respect to tax awareness it was evident that compliant taxpayers possessed a level of basic tax awareness that did impact upon their compliance behaviour. The degree of tax knowledge and awareness tended to vary between taxpayers in the sample but was nevertheless evident. Consequently, the answer to research question 6 was a qualified yes while hypothesis 6 was accepted in part.

Bibliography

Ajzen, I,& Fishbein, M, 1980, *Understanding Attitudes and Predicting Social Behavior,* Prentice-Hall, Englewood Cliffs, New Jersey.

Alm, J, Sanchez, I, & De Juan, A, 1995, ‘Economic and Noneconomic Factors in Tax Compliance’, *Kyklos,* vol. 48, no. 1, pp. 3-16.

Antonides, G, & Robben, H S J, 1995, ‘True Positives and False Alarms in the Detection of Tax Evasion’, *Journal of Public Psychology,* vol.16, no. 4, December, pp. 617-640.

Allingham, M.G., and Sandmo, A. (1972). Income tax evasion: A theoretical analysis. *Journal of Public Economics*, 1(3-4), 323-38.

Alm, J. (1991). A perspective on the experimental analysis of taxpayer reporting. *The Accounting Review,* 66(3), 577-93.

Arogundade, J. A. (2005). Nigerian income tax and its international dimension. Ibadan:Spectrum Books Ltd.

Chan, C.W., Troutman, C.T., and 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.

Chung, J., and Trivedi, V.U. (2003). The effects of friendly persuasion and gender on tax compliance behavior.*Journal of Business Ethics,* 47, 133–45.

Birch, A, Peters, T, & Sawyer, A, 2003, 'New Zealanders' Attitudes Towards Tax Evasion: A Demographic Analysis,' *New Zealand Journal of Taxation Law and Policy,* vol. 9, March, pp. 65-1 09.

Carnes, G A, & Englebrecht, T D, 1995, 'An Investigation of the Effect of Detection Risk Perceptions, Penalty Sanctions, and Income Visibility on Tax Compliance', *Journal of the American Taxation Association,* vol. 17, no. 1, Spring, pp. 26-41.

Cialdini, R B, 1989, 'Social Motivations to Comply: Norms, Values and Principles'. In Roth, J A, & Scholz, J T, eds, *Taxpayer Compliance: Social Science Perspective,* University of Pennsylvania Press, Philadelphia, pp. 200-207.

Coleman, C, & Wilkins, M, 1995, 'How do you want to play – honest?' Research into motivations for taxpayer compliance, in Walpole, M, & Evans, C, *Tax Administration in the 21*[st] *Century,* pp. 255-264.

Cuccia, A D, 1994, 'The Economics of Tax Compliance: What Do We Know and

Where Do We Go?', *Journal of Accounting Literature,* vol. 13, pp. 81-116. Czaja, R, & Blair, J, 1996, *Designing Surveys: A Guide to Decisions and Procedures,*

Pine Forge Press, California.

Dillman, D A, 1978, *Mail and Telephone Surveys: The Total Design Method.* John Wiley & Sons, New York.

Eriksen, K, & Fallan, L, 1996, 'Tax Knowledge and Attitudes towards Taxation: A Report on a Quasi-Experiment,' *Journal of Economic Psychology,* vol. 17, no. 3, June, pp. 387-402.

Falkinger, J & Walther, H, 1991 , 'Rewards versus Penalties: On a New Policy on Tax Evasion,' 19, *Public Finance Quarterly,* pp. 67-79.

Fowler, F, 1993, *Survey Research Methods,* Sage, Newbury Park.

Friedland, N, 1982, 'A Note on Tax Evasion as a Function of the Quality of Information about the Magnitude and Creditability of Threatened Fines: Some Preliminary Research', *Journal of Applied Social Psychology,* pp. 54-59.

Hasseldine, D J, Hite, P, James, S, & Toumi, M, 2007, 'Persuasive Communications: Tax Compliance Enforcement Strategies for Sole Proprietors', *Contemporary Accounting Research,* vol. 24, no. 1, Spring, pp. 171-194.

Hite, P A, 1997, 'Identifying and Mitigating Taxpayer Non-compliance', *Australian Tax Forum,* vol. 13, no. 2, pp. 155-1 80.

Hite, P A, & Roberts, M L, 1992, 'An Analysis of Tax Reforms Based on Taxpayers' Perceptions of Fairness and Self-Interest', *Advances in Taxation,* vol. 4, pp. 115-137.

Jackson, B R, & Jones, S M, 1985, 'Salience of Tax Evasion Penalties versus Detection Risk', *Journal of the American Taxation Association,* vol. 5, Spring, pp. 7-17.

Jackson, B R., & Milliron, V C, 1986, 'Tax Compliance Research: Findings, Problems and Prospects,' *Journal of Accounting Literature,* vol. 5, pp. 125-161.

Kinsey, K A, 1986, 'Theories and Models of Tax Cheating', *Criminal Justice Abstracts,*vol. 18, September, pp. 403-425.

Kornhauser, M E, 2007, Normative and Cognitive Aspects of Taxpayer Compliance: Literature Review and Recommendations for the IRS Regarding Individual Taxpayers, Annual Report to Congress, pp. 138-180.

Kornhauser, M E, 2007, 'A Tax Morale Approach to Compliance: Recommendations for the IRS', vol. 8, *Florida Tax Review,* pp. 599-632.

Lewis, A, 1982, *The Psychology of Taxation,* Martin Robertson, Oxford.

Loo, Ern Chen, 2006, 'Tax Knowledge Tax Structure and Compliance: A Report on a Quasi-Experiment,' *New Zealand Journal of Taxation Law and Policy,* vol. 12,pp. 117-140.

Mason, R, & Calvin, L D, 1978, 'A Study of Admitted Income Tax Evasion', *Law and Society,* vol. 13, Spring, pp. 73-89.

Mason, R, and Calvin, L D, 1984, 'Public Confidence and Admitted Tax Evasion', *National Tax Journal,* vol. 37, no. 4, pp. 489-496.

McKerchar, M, 2003, 'The Impact of Complexity Upon Tax Compliance - A Study of Australian Personal

Taxpayers ,' *A ustralian Tax Research Foundation,* Research Study no. 39, pp. 1-223.

Murphy, K, 2003, 'A Study into Tax Scheme Investors', paper presented at the Centre for Tax System Integrity Conference, Australian National University, Canberra.

Murphy, K, 2004, 'The Role of Trust in Nurturing Compliance: A Study of Accused Tax Avoiders', *Law and Human Behaviour,* vol. 28, pp. 187-198.

Niemirowski, P, Baldwin, S, & Wearing, A, 2001, in Walpole, M, & Evans, C, *Tax Administration in the 21st Century,* Prospect, Sydney.

Niemirowski, P, Wearing A and Baldwin S, 2002, The Determinants of Australian

Taxpayers' Compliance Behaviour: The Influence of Tax Related Values, Beliefs,

Attitudes and Behaviour, ATO Research Report, Commonwealth of Australia. Pallent, J, 2005, *SPSS Survival Manual, A step-by-step guide to data analysis using SPSS for Windows,* 2nd ed, Allen & Unwin, NSW.

Picur, D R, & Riahi-Belkaoui, A, 2006, 'The Impact of Bureaucracy, Corruption and Tax Compliance', *Review of Accounting and Finance,* vol. 5, no. 2, pp. 174-180. Pilkington, C, 1998, 'Taxation and Ethical Issues,' in Growthorpe, C & Blake, J, (eds.), *Ethical Issues in Accounting,* London, Routledge.

Porcano, T M, 1988, 'Correlates of Tax Evasion', *Journal of Economic Psychology,* vol. 9, no. 1, March, pp. 47-67.

Richardson, G, 2006, 'The Impact of Tax Fairness Dimensions on Tax Compliance Behaviour in Asian Jurisdiction: The Case of Hong Kong', *International Tax Journal,* Winter, pp. 39-52.

Richardson, M, and Sawyer, A J, 2001, 'A Taxonomy of the Tax Compliance Literature: Further Findings, Problems and Prospects', *Australian Tax Forum,* vol. 16, pp.137-320.

Schmolders, G, 1959, 'Fiscal Psychology: A New Branch of Public Finance', *National Tax Journal,* vol. 15, pp. 184-1 93.

Schwartz, R, and Orleans, S, 1967, 'On Legal Sanctions', *University of Chicago Law Review,* vol. 34, Winter, pp. 282-300.

Slemrod, J, 2007, 'Cheating Ourselves: The Economics of Tax Evasion', *Journal of Economic Perspectives,* vol. 21, no 1, Winter, pp.25-48.

Smith, K W, 1990, 'Integrating Three Perspectives on Noncompliance: A Sequential Decision Model', *Criminal Justice and Behaviour,* vol. 17, no. 3, September, pp. 350-369.

Spicer, M W, 1974, 'A Behavioral Model of Income Tax Evasion', PhD Thesis, Ohio State University, Columbus.

Tan, L M, 1998, 'Taxpayers' Perceptions of the Fairness of the Tax System – A Preliminary Study', *New Zealand Journal of Taxation Law and Policy,* vol. pp. 59-71.

Tittle, C R, & Logan, C, 1973, 'Sanctions and Deviance: Evidence and Remaining Questions', *Law & Society Review,* pp. 371-389.

Torgler, B, & Murphy, K, 2004, 'Tax Morale in Australia: What shapes it and has it changed over Time?' *Journal of Australian Taxation,* vol. 7, no. 2, pp. 298-335.

Torgler, B & Schneider, F, 2009, 'The Impact of Tax Morale and Institutional Quality on the Shadow Economy', *Journal of Economic Psychology,* vol. 30, pp.228-245.

Vogel, J, 1974, 'Taxation and Public Opinion in Sweden: An Interpretation of Recent Survey Data', *National Tax Journal,* vol. 27, pp. 499-513.

Wallschutzky, I G, 1984, 'Possible Causes for Tax Evasion', *Journal of Economic Psychology,* vol. 5, pp. 374-384.

Wallschutzky, I G, 1985, *Taxpayer Attitudes to Tax Avoidance and Evasion,* Australian Tax Research Foundation, Sydney, NSW, Australia.

Wearing, A, & Headley, B, 1997, "The Would-Be Tax Evader: A Profile," *Australian Tax Forum,* Vol. 13, No. 1, pp. 3-17.

Witte, A. D., and Woodbury, D. E, 1985, 'The Effect of Tax Laws and Tax Administration on Tax Compliance: The Case of the US Individual Income Taxpayer', *National Tax Journal,* vol. 38, no. 1, pp. 1-13.

Yin, R, 1989, *Case Study Research,* Sage, Newbury Park, CA.

Zimring, F E, & Hawkins, G J, 1973, *Deterrence, the legal threat in crime control,* Chicago, London: University of Chicago Press.

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