AN EMPIRICAL STUDY OF DEMOGRAPHICS OF PERCEPTIONS OF TAX EVASION IN NEW ZEALAND

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For the first time in New Zealand, this study investigates the relationship between perceptions of tax evasion as a crime and a set of demographic variables comprehensive in New Zealand. A questionnaire survey was administered to 315 respondents in the Auckland region. This research analyses the association between demographic variables and the perceptions of tax evasion using analysis of variance and analysis of correlation variance techniques, rigorous data analysis techniques that enable reliable inferences to be drawn from the study. The findings reveal that the most significant variables that affect tax evasion are education level, employment status, gender, residential location of the respondent, the audit of an income tax return by the Inland Revenue Department, first language and status as a tax professional. The results suggest that to address tax evasion the Inland Revenue Department should target taxpayers with some (or all) of the following characteristics: a low level of education, male, self-employed, those who have not been audited in the past, those who live in rural urban areas, those whose first language is English and those who are tax professionals.

1. INTRODUCTION

There are numerous studies on the severity of crimes in New Zealand and international criminal justice but very few in the context of the accounting and tax literature.¹ Most of the research in the

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¹ R Gupta, 'Perceptions of Tax Evasion as a Crime: Evidence from New Zealand' (2006) 12 *New Zealand Journal of Taxation Law and Policy* 199; R Gupta, 'How the Perceptions of Tax Evasion as a Crime and Other Offences Mirror the Penalties'

accounting and tax literature has taken place in the United States. Andreoni, Erard and Feinstein² and Richardson and Sawyer³ have indicated that there is a need for more empirical and institutional research on tax compliance behaviour in jurisdictions outside the United States. Niemirowski, Baldwin and Wearing⁴ have indicated that over the last 30 years, the results of tax evasion behavioural research have remained contradictory and inconclusive.

An effective and efficient tax system makes a crucial contribution to national economic well-being. Tax avoidance and tax evasion undermine the ability of a government to raise revenue in an equitable and efficient manner. According to James and Alley,⁵ 'non-compliance is likely to reduce both the efficiency and equity of an economic system, and will have effects beyond the simple act of non-compliance.' To ensure the integrity of the tax system, it is important to identify and close loopholes offering opportunities for tax avoidance and tax evasion, and to maintain vigorous enforcement.⁶

New Zealand, like many other jurisdictions, uses a tax system based on voluntary compliance, which is a system of taxation by agreement.⁷ Taxpayers are expected to understand and comply with their tax obligations but it is inevitable that under such a tax regime, a portion of taxpayers will fail to comply with their tax obligations.

^{(2007) 13} *New Zealand Journal of Taxation Law and Policy* 607. The present study builds upon these earlier studies.

² J Andreoni, B Erard and J Feinstein, 'Tax Compliance' (1998) 36 *Journal of Economic Literature* 818.

³ M Richardson and A Sawyer, 'A Taxonomy of the Tax Compliance Literature: Further Findings, Problems and Prospects' (2001) 16 *Australian Tax Forum* 137.

⁴ P Niemirowski, S Baldwin and A Wearing, 'Thirty Years of Tax Compliance Research: Of What Value Is It to the ATO?' in M Walpole and C Evans (eds), *Tax Administration in the 21st Century* (2001) 211.

⁵ S James and C Alley, 'Tax Compliance, Self Assessment, and Tax Administration in New Zealand: Is the Carrot or the Stick More Appropriate to Encourage Compliance?' (1999) 5 *New Zealand Journal of Taxation Law and Policy* 3.

⁶ Inland Revenue Department, *Supplementary Briefing Papers: Report on Research Commissioned by Inland Revenue* (1999) vol 2, 10–13.

⁷ Inland Revenue Department, Annual Report 2004 (2004) 26, 41.

Tax evasion is a serious threat to New Zealand's revenue base. The Committee of Experts stated that the Inland Revenue Department ('the IRD') needs to 'maintain a strategy of a sustained, always improving attack on tax evasion."⁸ Recognising this, the IRD's 1998–2001 Strategic Business Plan put forward that one of its key initiatives was to increase its efforts to minimise tax evasion and the underground economy by increasing the effectiveness of its audit system and improving the compliance attitudes of New Zealanders.⁹ In New Zealand, the IRD's net audit discrepancies trends show that since the introduction of Audit Strategy in July 2004 the contribution of tax evasion to audit discrepancies has increased significantly. In 2006, the net taxation effect of adjustments made to taxpayers' income tax returns as a result of audit activity was \$980 million, with net discrepancies of \$72 million in tax evasion, against a budgeted \$53 million.¹⁰ In 2007, the net taxation effect of adjustments made to taxpayers' income tax returns as a result of audit activity was \$996 million, with net discrepancies of \$128 million in tax evasion, against a budgeted \$63 million.¹¹ In 2006–07, the IRD spent \$138 million (26 per cent of total actual expenditure) on taxpayer audits, which was slightly higher than the previous year.¹²

The general public perception in New Zealand is that large companies have the means to structure their business activities in such a way that they pay less than their fair share of taxes.¹³ The IRD noted in its Strategic Business Plan for 1998–2001¹⁴ that tax evasion is more prevalent in small to medium size businesses than large

⁸ Committee of Experts on Tax Compliance, *Tax Compliance* (1998) 158.

⁹ Inland Revenue Department, *Strategic Business Plan 1998–2001* (1998) 35.

¹⁰ Inland Revenue Department, Annual Report 2006 (2006) 20.

¹¹ Inland Revenue Department, Annual Report 2007 (2007) 25.

¹² See ibid 72; and Inland Revenue Department, *Annual Report 2006*, above n 10, 70. In 2005–06, the IRD spent \$118.73 million (25 per cent of total actual expenditure) on taxpayer audits.

¹³ Davison Commission of Inquiry into Certain Matters Relating to Taxation, *Report* of the Wine-Box Inquiry (1997).

¹⁴ Inland Revenue Department, *Strategic Business Plan*, above n 9, 37.

corporations, because of the greater internal controls operating within widely-held businesses.

Past research has indicated that tax evasion, especially in small amounts, is not viewed as being morally wrong or considered as a serious crime.¹⁵ A New Zealand field study¹⁶ found that 23 per cent of individual women earners, 26 per cent of self-employed persons, 35 per cent of partnerships and 37 per cent of companies have evaded tax on at least one occasion in a two-year period. Tan and Sawyer¹⁷ suggest that all taxpayers will not view tax evasion with the same sense of morality, because not all people respond to morality appeals. Karlinsky and Bankman¹⁸ noted in their United States field study that small business owners were remarkably open and honest about their tax evasion behaviour in regard to the non-reporting of cash income. One potential reason for this openness is that taxpayers may view tax evasion as a relatively minor offence.

Tax evasion is not specifically defined in the *Tax Administration* Act 1994 (NZ) ('the TAA 1994'). In general terms, tax evasion occurs where a taxpayer has made a deliberate or intentional attempt to cheat the IRD. According to the IRD, 'tax evasion is a crime, with real victims and those that evade get caught and penalised. It is critical for voluntary compliance that New Zealanders all realise this.'¹⁹ The Court of Appeal in R v Hawken stated that evasion

¹⁵ See Y Song and T Yarbrough, 'Tax Ethics and Taxpayer Attitudes: A Survey' (1978) 38 *Public Administration Review* 442; Westat Inc, *Individual Income Tax Compliance Factors Study* (1980); Yankelovich, Skelly & White Inc, *Taxpayer Attitudes Study: Final Report* (1984).

¹⁶ P Oxley, 'Women and Paying Tax' in C Scott (ed), *Women and Taxation* (1993)
48.

¹⁷ L Tan and A Sawyer, 'A Synopsis of Taxpayer Compliance Studies: Overseas Vis-à-Vis New Zealand' (2003) 9 *New Zealand Journal of Taxation Law and Policy* 431.

¹⁸ S Karlinsky and J Bankman, 'Developing a Theory of Cash Businesses Tax Evasion Behavior and the Role of Their Tax Preparers' (Paper presented at the 5th International Conference on Tax Administration: Current Issues and Future Developments, Sydney, 5 April 2002).

¹⁹ Inland Revenue Department, *Strategic Business Plan*, above n 9, 36–7.

implicitly requires 'an intention to defraud the Inland Revenue Department and knowingly not providing information to the Commissioner [of Inland Revenue] when required to do so.²⁰ Lord Templeman in Commissioner of Inland Revenue v Challenge Corporation Ltd states that

evasion occurs when the Commissioner [of Inland Revenue] is not informed of all the facts relevant to an assessment of tax. Innocent evasion may lead to a reassessment. Fraudulent evasion may lead to a criminal prosecution as well as reassessment.²¹

The main area of dispute in applying ss 141E(1) (civil evasion) and 143B (criminal evasion) of the TAA 1994 will be establishing the knowledge and the intention of the taxpayer, as the taxpayer will have to both know of the existence of a tax law, and be knowingly in breach of it to be liable under the sections. Tax evasion, by its very nature being illegal,²² immoral and unethical, is difficult to detect in practice.

My previous article titled 'Perceptions of Tax Evasion as a Crime: Evidence from New Zealand²³ endeavoured to report the results of an investigation into the perceptions of 312 New Zealand taxpayers, drawn from the Auckland area, of the seriousness of tax evasion relative to 20 other offences (crimes and violations), with the results compared to Karlinsky, Burton and Blanthorne's United States results.²⁴ The results suggested that tax evasion is perceived as less serious relative to other white collar crimes such as accounting fraud, welfare fraud, violation of minimum wage laws and child labour laws. My other previous article titled 'How the Perceptions of

²⁰ [2006] 22 NZTC 19, 876 (Young J). ²¹ [1987] AC 155, 167.

²² Contrast this with the view of R McGee, 'Is Tax Evasion Unethical?' (1994) 42 Kansas Law Review 411 that tax evasion is not unethical but that the actions of tax enforcers are unethical.

²³ Gupta, 'Perceptions of Tax Evasion as a Crime', above n 1.

²⁴ S Karlinsky, H Burton and C Blanthorne, 'Perceptions of Tax Evasion as a Crime' (2004) 2 e-Journal of Tax Research 226.

Tax Evasion as a Crime and Other Offences Mirror the Penalties²⁵ examined if there is in fact a consistent relationship between the perceived seriousness of offences and the statutory punishments. Interestingly, the results suggested that the statutory punishments for crimes are closely related to the seriousness as perceived by respondents. These studies did not examine the effect of several demographic factors on perceptions of the seriousness of tax evasion as a crime. The present study examines the effect of several demographic factors such as education, gender, income level, employment status, home ownership, tax professionals, political affiliation and marital status, and first language on perceptions of the seriousness of tax evasion as a crime.

The remainder of this article is organised as follows. Part 2 provides a succinct review of the tax compliance literature, with particular reference to perceptions of tax evasion relating to demographic variables. Part 3 details the research design and methodology employed, and the results of the survey are outlined in Part 4. Part 5 considers limitations and sets out the conclusions from this study.

2. LITERATURE REVIEW

As mentioned previously, a considerable body of research exists that examines the issues of perceived seriousness of a crime and taxpayers' compliance behaviour. However, in the accounting and tax literature in New Zealand and overseas, few studies have considered people's perceptions of the seriousness of tax evasion relative to demographic and other tax compliance variables. Much of this literature has been reviewed by Richardson and Sawyer.²⁶ Richardson and Sawyer reviewed all tax compliance literature from 1986 to 1997, regardless of country of origin. Besides examining 14

²⁵ Gupta, 'The Perceptions of Tax Evasion', above n 1.

²⁶ Richardson and Sawyer, above n 3.

variables identified in Jackson and Milliron's study,²⁷ five additional variables (compliance costs, tax preparer, framing, positive inducements and tax amnesties) were also reviewed by Richardson and Sawyer. In the majority of the studies they reviewed they found that female taxpayers were more compliant than their male counterparts, and older taxpayers tended to be more compliant than younger taxpayers. However, they noted that the compliance gap between males and females appears to be reducing with the emergence of a new generation of liberated women. They found that the degree of certainty held regarding the relationship with taxpayer compliance behaviour and demographic variables has been virtually non-existent for a majority of the variables.

Besides reviewing the literature reviewed by earlier studies, the present study also reviews the literature since 1997 as this is not covered by Richardson and Sawyer.²⁸

Spicer and Lundstedt²⁹ surveyed United States taxpayers' attitudes toward evasion and self-reported evasion behaviour. They found that tax attitude was related to perceptions of inequity, the number of tax evaders known and perceived probability of detection, but not to the perceived severity of sanctions. The findings from this study indicated that background factors significantly related to respondent's attitudes were age, experience with tax audits, and level and sources of family income. Self-reported evasion was found to be related to perceptions of inequity and the number of evaders known, and a background factor related to tax evasion was experience with audits.

²⁷ B Jackson and V Milliron, 'Tax Compliance Research: Findings, Problems and Prospects' (1986) 5 *Journal of Accounting Literature* 125. The 14 variables will be discussed in detail below.

²⁸ Richardson and Sawyer, above n 3.

²⁹ M Spicer and J Lundstedt, 'Understanding Tax Evasion' (1976) 2 *Public Finance* 295.

Song and Yarbrough, in a United States field study, investigated taxpayers' perceptions of tax ethics and attitudes.³⁰ They examined perceptions of the seriousness of tax evasion against eight other crimes. The findings from their study indicated that 87 per cent of respondents agreed with the statement that "tax dodging" is an offence, and that it hurts no one but the government.' Most respondents in the study did not rank tax evasion as particularly serious when compared to other crimes. They also considered various demographics to see if there is any correlation between a subject's characteristics and tax ethics. The results indicate that income level, a sense of alienation, general distrust of people, belief that others cheat, educational level and lack of confidence in government influences the tax ethics practised by people generally. This study expands Song and Yarbrough's study by examining the effect of several demographic factors on the relative perceived severity of 20 other crimes and violations (besides tax evasion) within the New Zealand context.

Westat Inc surveyed 528 United States taxpayers regarding self-reported tax compliance.³¹ The study reports that the most common form of admitted non-compliance was underreporting of income while the least common was non-filing. Respondents more likely to report non-compliance were younger, somewhat more educated, somewhat more affluent, significantly more likely to prepare their own return, significantly more likely to report Internal Revenue Service ('IRS') initiated contact, and to have friends who have been known to be non-compliant. Variables not found to be significant were attitudes toward the IRS and government services, financial satisfaction and risk-taking attitudes. Title³² also found that single taxpayers are less compliant because they are less risk averse.

³⁰ Y Song and T Yarbrough, 'Tax Ethics and Taxpayer Attitudes: A Survey' (1978)
38 Public Administration Review 442.

³¹ Westat, above n 15.

³² C Title, Sanctions and Social Deviance: The Question of Difference (1980).

Spicer and Hero³³ examined the relationship between taxpayer's own level of evasion and the perceived behaviour of others and experience of being audited. Their study suggests that taxpayers who have been audited are more likely to assess the probability of audit as higher and therefore decrease their levels of evasion.

Wallschutzky³⁴ investigated Australian taxpayers' attitudes to tax avoidance and evasion. The findings from this study indicated that some 86 per cent of the respondents considered that the level of income tax in relation to the level of government services was too high, and that this was the main reason for a high level of tax evasion. The impact of tax advisers on tax avoidance was also significant.

Jackson and Milliron³⁵ reviewed tax compliance literature from 1970 to 1985. Their study considered the impact of 14 variables (age, gender, education, income level, withheld income source. occupation, compliant peers, ethics, fairness, complexity, IRS contact, sanctions, probability of detection, tax rates) that had been linked to compliance behaviour of individuals and also highlighted the unresolved issues. They found that female taxpayers were more conforming, conservative and bound by moral restraints than their male counterparts and older taxpayers are normally more compliant than younger taxpayers. They claimed that enhancing the level of general fiscal knowledge improves tax compliance by means of more positive taxation perceptions. In addition, increased knowledge of tax evasion opportunities assists non-compliance and had a negative influence on tax compliance. However, the study focused on studies originating from the United States.

³³ M Spicer and R Hero, 'Tax Evasion and Heuristics: A Research Note' (1985) 26 *Journal of Public Economics* 263.

³⁴ I Wallschutzky, 'Taxpayer Attitudes to Tax Avoidance and Evasion' (Research Study No 1, Australian Tax Research Foundation, 1985).

³⁵ Jackson and Milliron, above n 27.

Crane and Nourzad³⁶ investigated the effect of marginal tax rates on income tax evasion and found that individuals with higher levels of income tend to evade more. Oxley³⁷ surveyed 16 000 randomly selected taxpayers in New Zealand, with 52 per cent of respondents being women. The respondents were asked to assess on a five-point Likert scale the seriousness of a \$500 tax evasion and five other offences involving the same amount of money, two of which were property-related crimes and three of which were white collar crimes. The findings from this study indicated that 10 per cent of women respondents felt that tax evasion was not serious. They found that 53 per cent of women respondents considered that tax evasion was an extremely serious offence compared to cashing a cheque from a stolen cheque book (80 per cent), theft from an employer (78 per cent), shoplifting (77 per cent), social welfare benefit fraud (74 per cent) and receiving a fraudulent insurance claim (67 per cent). The results revealed that males considered evading \$500 of tax to be less serious than females.

Hasseldine, Kaplan and Fuller's³⁸ study of the characteristics of New Zealand tax evaders indicate that evasion behaviour (under-reporting income and overstating deductions) is associated with age, income, the number of evaders personally known, and the morality and consequences of evasion behaviour. In addition, the results show that the factors that give rise to or are associated with one category of evasion behaviour are not necessarily predictive of another type of evasion behaviour, suggesting the associations between factors are not causal.

Tan³⁹ carried out a survey of tertiary business studies students to investigate the effect of demographic variables on New Zealand

³⁶ S Crane and F Nourzad, 'Tax Rates and Tax Evasion: Evidence from California Amnesty Data' (1990) 43 *National Tax Journal* 189.

³⁷ Oxley, above n 16, 48.

³⁸ D Hasseldine, S Kaplan and L Fuller, 'Characteristics of New Zealand Tax Evaders: A Note' (1994) 34 *Accounting and Finance* 79.

³⁹ L Tan, 'Taxpayers Perceptions of the Fairness of the Tax System: A Preliminary Study' (1998) 4 *New Zealand Journal of Taxation Law and Policy* 59.

taxpayers' perceptions of tax fairness and tax compliance behaviour. The results revealed that tax rate structure, tax return filing status and age has an effect on perceptions of the appropriate tax treatment of different income levels. Older respondents appeared to perceive the system to be fairer if the high income group bears a higher proportion of tax as compared to low and middle income groups.

McIntosh and Veal⁴⁰ surveyed tertiary students to investigate the relationship between age, gender and attitudes of New Zealanders towards small business and individual tax evasion. They found 16 per cent of respondents felt that tax evasion was totally acceptable, and 30 per cent felt that tax evasion was totally unacceptable. The results indicate a high level of public acceptability for minor tax evasion offences, and when compared with females, males viewed understating income for tax purposes as acceptable. However, some demographic factors such as number of years of work experience, tax return filing experience, income level and educational qualifications were not considered.

Eicher, Thomas and Wendy⁴¹ surveyed men and women respondents regarding their perception of various crimes, including cheating on their tax return. The study reports that 49 per cent of men and 59 per cent of women said that it is not at all acceptable to cheat on your income taxes. The findings revealed that overstating tax deductions was acceptable to 44 per cent of males and 36 per cent of females.

Birch, Peters and Sawyer⁴² surveyed New Zealand tertiary students to investigate the relationship between demographic variables and New Zealanders' attitudes towards tax evasion. They found 14 per cent of respondents felt that tax evasion was totally

⁴⁰ R McIntosh and J Veal, 'Tax Evasion and New Zealanders' Attitudes towards It' (2001) 7 *New Zealand Journal of Taxation Law and Policy* 80.

⁴¹ J Eicher, J Thomas and L Wendy, 'Men, Women, Taxes and Ethics' [2002] *Tax Notes* 401.

⁴² A Birch, T Peters and A Sawyer, 'New Zealanders' Attitudes towards Tax Evasion: A Demographic Analysis' (2003) 9 *New Zealand Journal of Taxation Law and Policy* 65.

acceptable and 25 per cent said tax evasion was totally unacceptable. The findings revealed that eight out of 10 demographic variables analysed (course, age, ethnicity, qualification, employment status, occupation, income, work experience and tax return filing experience) held statistically significant relationships at the five per cent level with the acceptability and incidence of tax evasion behaviour. The two demographic variables that failed to show a statistically significant relationship were gender and employment status. Their results indicated that respondents with a taxation qualification and those with a higher qualification are least likely to have understated their taxable income. The results also showed that younger respondents were significantly more likely than respondents with several years work experience to consider over-claiming of deductions as acceptable.

Richardson⁴³ carried out a survey of postgraduate business students to investigate the impact of some key demographic variables relating to age, gender, education and occupation status on perceptions of fairness of the tax system in Hong Kong and the results were analysed using the analysis of variance ('ANOVA') statistical technique. The results revealed that respondents in the 30–34 age group perceived the Hong Kong tax system to be fairer in comparison with the younger respondents. He also found that females perceived the Hong Kong tax system to be fairer than males. Education and occupation status were found not to be statistically significant. Richardson⁴⁴ also carried out a survey of postgraduate business students to investigate the impact of some key demographic variables relating to age, gender, education and occupation status on tax compliance behaviour in Australia and the results were analysed using the ordinary least squares multiple regression statistical

⁴³ G Richardson, 'An Exploratory Study of Taxpayers' Perceptions of Fairness of the Hong Kong Tax System' (2004) 10 *New Zealand Journal of Taxation Law and Policy* 131.

⁴⁴ G Richardson, 'A Preliminary Study of the Impact of Tax Fairness Perception Dimensions on Tax Compliance Behaviour in Australia' (2005) 20 *Australian Tax Forum* 407.

technique. The results revealed that respondents relating to the 20–29 age group and the 16–17 years of education group are significantly correlated (p<0.01) with tax compliance behaviour. None of the other variables were found to be significant. The results show that demographic variables have a minor impact on tax compliance behaviour in Australia. However, the survey participants were all postgraduate business students and hence the results may not be generalisable to the population as a whole.

Devos⁴⁵ examined the attitudes of Australian tertiary students towards tax evasion. Interestingly, the findings revealed that the majority of the respondents (65 per cent) were unsure whether tax evasion was a serious offence. Devos⁴⁶ also investigated the relationship between eight demographic variables (gender, age, nationality, education and qualifications, occupation and income level, employment status and tax return filing status) and the attitudes of Australian and New Zealand tertiary students towards tax evasion. The research indicates that for Australian respondents all the statistically eight demographic variables held significant relationships at the five per cent level with the incidence of tax evasion. The findings from New Zealand respondents revealed that six of the eight variables (age, nationality, education, occupation, income level and tax return filing status) held important implications for tax evasion. The demographic variables employed were tested for statistical significance at five per cent. However, the respondents in Devos' studies were chosen from among a convenience sample of students and the sampling schedule was not random, which resulted in some demographics being under-represented and potentially biased results. Devos indicated that a random sampling technique should have been employed, a better cross-section of respondents

⁴⁵ K Devos, 'The Attitudes of Tertiary Students on Tax Evasion and the Penalties for Tax Evasion: A Pilot Study and Demographic Analysis' (2005) 3 *e-Journal of Tax Research* 222.

⁴⁶ K Devos, 'The Attitudes of Australian and New Zealand Tertiary Students towards Tax Evasion: A Comparative Study and Demographic Analysis' (2006) 12 *New Zealand Journal of Taxation Law and Policy* 293.

should have been selected, and a more rigorous statistical analysis undertaken.

This study makes a contribution to the literature by reporting across demographic variables that most previous studies have utilised (for example, gender, income level, age, education, occupation and marital status), responding to earlier calls for random sampling and more rigorous statistical measures and eliminating potential bias where possible.

3. RESEARCH DESIGN AND METHOD

This Part describes the sample, the survey questionnaire, the measures used in the analysis, the empirical analysis and provides a summary of the demographic data.

3.1 Sample and Survey Questionnaire

Potential respondents were randomly selected from the telephone directory from the greater Auckland metropolitan areas. The questionnaire used in this study was adapted from the United States study by Karlinsky, Burton and Blanthorne.⁴⁷ Some modification was necessary because the United States legal environment differs from New Zealand. The modifications were made using a focus group, which is a data collection method that combines the features of brainstorming and brain writing.⁴⁸ A focus group was appropriate for this research as it could generate ideas about the common crimes in New Zealand and prioritise these ideas. Participants were recruited to discuss common crimes in New Zealand and how the legal environment alters behaviours between the United States and New Zealand.⁴⁹ Results were determined by the group as a whole and insurance fraud, a white collar offence, was added to Karlinsky, Burton and Blanthorne's list of offences.

⁴⁷ Karlinsky, Burton and Blanthorne, above n 24.

⁴⁸ C Brahm and B Kleiner, 'Advantages and Disadvantages of Group Decision Making Approaches' (1996) 2 *Team Performance Management* 30.

 ⁴⁹ K de Ruyter, 'Focus versus Nominal Group Interviews: A Comparative Analysis' (1996) 14 *Marketing Intelligence and Planning* 44.

A covering letter explaining the purpose of the study was attached to the survey questionnaire. To encourage candid responses to the survey, the letter explained that the responses would remain anonymous. On the survey questionnaire, no names were given by respondents. Since respondents were asked for their personal perceptions, the survey emphasised that there were no right or wrong answers. In order to target young respondents, six high schools were randomly selected from different suburbs.

Ball⁵⁰ considered it an advantage to personally distribute the questionnaires as this could lead to a better response rate. Accordingly, the survey questionnaire was also administered to potential respondents identified by the researcher. The questionnaire (along with a self-addressed prepaid postage envelope) was mailed to these potential respondents. Eighty copies of the survey instrument were distributed to the principals of the six randomly selected high schools, who were asked to distribute the survey instrument to Year 13 students. Ten days before the due date for the return of the survey forms, potential respondents were sent a reminder.

Out of a total of 480 surveys administered, 315 were returned⁵¹ giving a response rate of 66 per cent. This is a relatively high response rate compared to prior studies.⁵² The survey was three pages in length, and a number of respondents commented that they enjoyed participating in the survey questionnaire because it was simple and quick. Three hundred and twelve returned surveys were fully completed and these were used in the data analysis.

⁵⁰ C Ball, 'Rural Perceptions of Crime' (2001) 17 Journal of Contemporary Criminal Justice 37.

⁵¹ This includes 57 completed responses from six different schools.

⁵² Tan achieved a 58 per cent response rate in a mail out survey (see Tan, above n 39); McIntosh and Veal achieved a 50 per cent response rate (see McIntosh and Veal, above n 40); Oxley achieved a 29 per cent response rate (see Oxley, above n 16); Hasseldine, Kaplan and Fuller achieved a 22 per cent response rate (see Hasseldine, Kaplan and Fuller, above n 38); and Birch, Peters and Sawyer achieved an 86 per cent response rate (see Birch, Peters and Sawyer, above n 42).

The survey questionnaire included two sections. Section 1 dealt with crime seriousness perceptions (that is, 21 offences concerning the seriousness perceptions of New Zealanders) and Section 2 dealt with demographics (that is, items on occupation status, education, income levels, age, gender, marital status, location, political affiliation, home ownership, churchgoing, tax returns professionally prepared, audit by the IRD). The survey questionnaire is available from the author.

3.2 Measures

Respondents were asked to indicate their opinion on the seriousness of 20 offences on a five-point Likert-type scale with verbal anchors ranging from 'not serious' to 'extremely serious' where one represented not serious and five represented extremely serious. Finally, respondents were requested to answer some questions designed to capture their demographics. In this article, the perceptions of tax evasion data are analysed in relation to respondents' demographics.

3.3 Empirical Analysis

Since the dependent variable was measured using a five-point Likert-type scale and independent variables were categorical in nature, ANOVA and analysis of correlation variance ('ANCOVA') techniques⁵³ were used to analyse the quantitative data obtained from the survey as they are the most suitable statistical techniques for such data. Before performing any analysis, data for all variables were tested for the assumption of normality using skewness and kurtosis. The variables which met the conditions of normality were tax evasion, education, gender, employment, marital status, age, political affiliation and religious values. Skewness and standard error of

⁵³ A Gaur and S Gaur, *Statistical Methods for Practice and Research: A Guide to Data Analysis Using SPSS* (2006); J Stock and M Watson, *Introduction to Econometrics* (2nd ed, 2006).

skewness for the variables which met the conditions of normality were found to be less than 2.

4. **RESULTS**

4.1 Overall Results

Table 1 sets out the respondents' ratings for all 21 offences. The mean ratings suggest the most serious offences were, not surprisingly, murder, child molestation and rape, while smoking marijuana, jaywalking and illegal parking were rated as the least serious offences. It appears that regardless of differences in the legal environment between New Zealand and the United States,⁵⁴ taxpayers in both countries hold similar views about the top five offences and more important, the mean for tax evasion was 3.4 in New Zealand (compared to 3.3 in the United States), ranking it as the 12th most serious offence (compared to 11th in the United States).

Table 1: Rating of Offences Surveyed Compared toKarlinsky, Burton and Blanthorne

Offence	Overall Rating Mean New Zealand	Ranking New Zealand	Overall Rating Mean United States	Ranking United States
Murder	5.0	1	5.0	1
Child Molestation	4.9	2	4.8	3
Rape	4.7	3	4.9	2
Driving while Intoxicated	4.3	4	3.9	5
Robbery	4.1	5	4.0	4
Child Labour	3.9	6	3.8	7

⁵⁴ Karlinsky, Burton and Blanthorne, above n 24.

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Carjacking	3.9	7	3.8	6
Welfare Fraud	3.7	8	3.3	10
Accounting Fraud	3.6	9	3.7	8
Minimum Wage Violation	3.6	10	3.3	12
Insurance Fraud	3.4	11	NA	NA
Tax Evasion	3.4	12	3.3	11
Running a Red Light	3.3	13	2.6	15
Insider Trading ⁵⁵	3.1	14	3.3	9
Shoplifting	2.8	15	2.8	13
Speeding	2.5	16	2.1	18
Ticket Scalping	2.2	17	1.8	19
Bike Theft	2.1	18	2.3	16
Illegal Parking	1.9	19	1.5	20
Jaywalking	1.8	20	1.3	21
Smoking Marijuana	1.6	21	2.3	17
Prostitution	NA	NA	2.8	14

4.2 Tax Evasion and Violent and White Collar Offences

The average rating for tax evasion (3.4) was compared to the three violent crimes in the survey: murder (5.0), child molestation

⁵⁵ Insider trading in New Zealand differs considerably to the United States. It has never been successfully applied in New Zealand due to its complex method of implementation, as compared to the numerous successful cases in the United States.

(4.9) and rape (4.7). *T*-tests were conducted to test the differences between the means for violent acts, tax evasion and white collar crimes. The difference between the mean rating for tax evasion and violent crimes was significant at the 0.01 level (see Table 2). White collar offences, even though they threaten the social fabric of modern-day society as evidenced by the recent Enron, WorldCom, Global Crossing and Tyco scandals, were rated as significantly less serious than violent offences.

So how do people feel about the seriousness of white collar crime and tax evasion in particular within this category? Cullen, Link and Polanzi examined public opinion about white collar offences.⁵⁶ Warr examined the wrongfulness and harmfulness of three classes of crime (property, personal and public order).⁵⁷ Rosenmerkel examined wrongfulness and harmfulness ratings of white collar crimes in comparison with violent offences or offences related to property.⁵⁸ Collectively, the results of these studies reveal that, when deciding the level of seriousness, participants relied more heavily on the concept of harmfulness for a white collar crime and, for offences related to property, they relied more heavily on the wrongfulness of an offence. However, these studies have not categorised white collar offences within various types.

The present study distinguished between seven white collar offences: tax evasion, accounting fraud, violation of child labour laws, insider trading, violation of welfare laws, violation of minimum wage laws and insurance fraud. The rating of tax evasion was compared to the ratings for the other six white collar offences in the survey. The differences between the mean ratings for tax evasion and violation of child labour laws, welfare fraud and insider trading were significant at the 0.01 level (see Table 2). Based on the results

⁵⁶ F Cullen, B Link and C Polanzi, 'The Seriousness of Crime Revisited: Have Attitudes toward White-Collar Crime Changed?' (1982) 20 *Criminology* 83.

⁵⁷ M Warr, 'What Is the Perceived Seriousness of Crimes?' (1989) 27 *Criminology* 795.

⁵⁸ S Rosenmerkel, 'Wrongfulness and Harmfulness as Components of Seriousness of White-Collar Offenses' (2001) 17 *Journal of Contemporary Criminal Justice* 308.

of the paired *t*-tests on the differences in tax evasion and other white collar offences, ratings for tax evasion and the violation of minimum wage laws and accounting fraud were significant at the 0.05 level but there was no significant difference between tax evasion and insurance fraud (see Table 2).

Violent and White Collar Crimes	Mean		Mean	Mean Difference	<i>t</i> -test
Violent Crimes	4.86	Tax Evasion	3.4	0.845	8.143**
Violation of Child Labour Laws	3.9	Tax Evasion	3.4	0.510	5.445**
Violation of Welfare Laws	3.7	Tax Evasion	3.4	0.308	3.449**
Accounting Fraud	3.6	Tax Evasion	3.4	0.208	2.443*
Violation of Minimum Wage Laws	3.6	Tax Evasion	3.4	0.205	2.505*
Insurance fraud	3.4	Tax Evasion	3.4	0.010	0.119
Insider Trading ⁵⁹	3.1	Tax Evasion	3.4	0.292	4.006**

* p < 0.05 ** p < 0.01

Of the seven white collar offences, violation of child labour laws and welfare fraud were rated as the most serious. The seven white collar offences ranked from the sixth most serious offence to the 14th most serious offence in the present survey. In the present survey, accounting fraud was ranked higher than tax evasion, which may be

⁵⁹ New Zealand's insider trading laws changed on 29 February 2008.

a consequence of increased social awareness because of the recent Enron, WorldCom, Global Crossing and Tyco scandals.

4.3 Demographic Effects

4.3.1 Descriptive Statistics

Table 3 presents the demographic data of the sample. The majority of the respondents (45 per cent) had high school education followed by 29 per cent who had some high school education. The highest level of completed education is a graduate degree (achieved by 22 per cent of the respondents). Only 4 per cent have a law degree. The employment status of the sample was varied. The sample consisted of 39 per cent of respondents who are employees, 28 per cent who are self-employed and 19 per cent who are students. Eight per cent of the respondents are retirees and 6 per cent are not currently working.

There was an almost equal percentage of male (53 per cent) and female respondents. The percentage of married respondents (55 per cent) was almost identical to the percentage of respondents whose first language is English (54 per cent).

The household income level of the respondents varied as well. Most (29 per cent) have income levels under \$20 000. Twenty seven per cent of the respondents have income in the range of \$20 000– \$40 000, 21 per cent earn in the range of over \$40 000 and up to \$60 000, 17 per cent in the range of over \$60 000 and up to \$80 000, followed by 6 per cent who earn more than \$80 000.

The respondents were mainly (31 per cent) in the 31–40 year old range with only 6 per cent over the age of 60. Forty one per cent of the respondents own their home⁶⁰ as compared to 59 per cent who do not. Thirty one per cent of respondents attend church at least once a month. A small number (10 per cent) of the respondents had their income tax audited by the IRD. Twenty nine per cent of the respondents hire someone to prepare their income tax return as

⁶⁰ They may be living in their own home or may be landlords.

compared to 71 per cent who do not hire anyone. Some of the respondents were tax professionals (6 per cent). Most of the respondents (48 per cent) live in the Central City. This is followed by 28 per cent living in Manukau City, 13 per cent in North Shore City and the least (11 per cent) live in Waitakere City.

Variable	Responses	Percentage		
Age				
Under 20	65	21		
20–30	43	14		
31–40	96	31		
41–60	79	25		
Over 60	29	9		
Total	312	100		
Gender				
Male	165	53		
Female	147	47		
Total	312	100		
Highest Level of Completed Education				
Some high school	90	29		
High school	140	45		
Graduate degree	69	22		
Law degree	13	4		
Total	312	100		
Employment Status				
Student	59	19		
Self-employed	87	28		
Employee	122	39		

 Table 3: Summary of Demographic Data⁶¹

⁶¹ Some additional variables are included to demographic data taken from Gupta, 'Perceptions of Tax Evasion as a Crime', above n 1.

Not currently working	19	6
Retired	25	8
Total	312	100
Household Income Level		
Under \$20 000	91	29
\$20 000-\$40 000	84	27
Over \$40 000 and up to \$60 000	65	21
Over \$60 000 and up to \$80 000	53	17
Over \$80 000	19	6
Total	312	100
Location		
Central City	149	48
North Shore City	41	13
Manukau City	87	28
Waitakere City	35	11
Total	312	100
Home Ownership		
Own home	128	41
Other	184	59
Total	312	100
Marital Status		
Single	142	45
Married	170	55
Total	312	100
Income Tax Audited by IRD		
No	280	90
Yes	32	10
Total	312	100
Hire Someone to Prepare Tax Returns		
No	221	71
Yes	91	29

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Total	312	100
Tax Professional		
No	293	94
Yes	19	6
Total	312	100
First Language		
English	168	54
Other	144	46
Total	312	100
Attend Church		
At least once a month	96	31
Other	216	69
Total	312	100

4.3.2 ANOVA Results

An ANOVA was performed on perceptions of tax evasion. Demographics of respondents constituted the independent variables for the study.

Table 4: ANOVA and Mean Differences

Panel A: ANOVA of Tax Evasion by Education

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	135.823	3	45.274	77.267	.000
Within Groups	180.472	308	.586		
Total	316.295	311			

Education	Some high school	High school	Graduate degree	Law degree	Mean Seriousness Score
Some high school		1.006 (10.673) ^{***}	1.598 (11.878) ^{***}	2.517 (10.932) ^{***}	2.48
High school	1.006 (10.673) ^{***}		0.592 (5.156) ^{***}	1.511 (7.064) ^{***}	3.49
Graduate degree	1.598 (11.878) ^{***}	0.592 (5.156) ^{***}		0.919 (2.921) ^{**}	4.08
Law degree	2.517 (10.932)***	1.511 (7.064) ^{***}	0.919 (2.921) ^{**}		4.14

Panel B: Post Hoc Test Reporting the Mean Difference between Mean Seriousness Scores of Tax Evasion for Pairs of Education⁶²

The ANOVA results in Panel A of Table 4 show a statistically significant difference in perceptions of tax evasion across educational qualifications. This suggests that the level of education affects people's perception of tax evasion as a crime. To determine the drivers of this observed difference, a post hoc *t*-test between educational qualifications was performed. The results in Panel B of Table 4 show a distinguishable difference between difference between difference between those who have not completed high school education (mean 2.48), and those who have only completed high school (mean 3.49) vis-à-vis those who have a graduate degree (mean 4.08) or law degree (mean 4.92). This finding is consistent with the literature⁶³

⁶² Panel B notes:

⁽a) Cell values indicate mean difference, followed by the corresponding *t*-value in brackets.

⁽b) *** p < 0.001, ** p < 0.01, * p < 0.10 (2 tail).

⁶³ Song and Yarbrough, above n 15; Westat, above n 15; Birch, Peters and Sawyer, above n 42; Devos, 'Comparative Study', above n 46.

which suggests that with a higher level of education, both males and females change their attitude towards tax evasion.

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	137.846	1	137.846	239.466	.000
Within Groups	178.448	310	.576		
Total	316.295	311			

Table 5: ANOVA of Tax Evasion by Gender

The results reported in Table 5 show a statistically significant difference in perceptions of tax evasion according to gender. The average score for the seriousness of tax evasion for males is 3.20 and the average score for females is 3.60. This suggests that male survey participants compared to female survey participants do not perceive tax evasion as a serious offence. The result is consistent with prior studies that gender affects perceptions of tax evasion.⁶⁴

Table 6: ANOVA and Mean Differences

Panel A: ANOVA of Tax Evasion by Employment

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	139.920	4	34.980	60.887	.000
Within Groups	176.374	307	.575		
Total	316.295	311			

⁶⁴ Jackson and Milliron, above n 27; Richardson and Sawyer, above n 3; Eicher, Thomas and Wendy, above n 41; Oxley, above n 16; McIntosh and Veal, above n 40; Richardson, 'Exploratory Study', above n 43.

Panel B: Post Hoc Test Reporting the Mean Difference between
Mean Seriousness Scores of Tax Evasion for Pairs of Employment
Status ⁶⁵

Employment	Self- employed	Employee	Student	Retired	Not currently working	Mean Seriousness Score
Self- employed	_	1.500 (15.115) ^{***}	0.709 (5.836) ^{***}	1.213 (7.501) ^{***}	1.902 (11.387) ^{***}	2.47
Employee	1.500 (15.115) ^{***}	_	0.792 (6.286) ^{***}	0.287 (1.640)	0.401 (2.133) ^{**}	3.97
Student	0.709 (5.836) ^{***}	0.792 (6.286) ^{***}	_	0.505 (2.435) ^{**}	1.193 (5.553) ^{***}	3.18
Retired	1.213 (7.501) ^{***}	0.287 (1.640)	0.505 (2.435) ^{**}	_	0.688 (2.597) ^{**}	3.68
Not currently working	1.902 (11.387) ^{***}	0.401 (2.133) ^{**}	1.193 (5.553) ^{***}	0.688 (2.597) ^{**}	_	4.37

The ANOVA results in Panel A of Table 6 show a statistically significant difference in perceptions of tax evasion across employment status. This suggests that employment status affects people's perception of tax evasion as a crime. To determine the drivers of this observed difference, a post hoc *t*-test between different employment statuses was performed. The results in Panel B of Table 6 show a significant difference between employment statuses. This suggests that taxpayers who are self-employed (mean 2.47) and students (mean 3.18) perceived tax evasion to be a less serious offence as compared to retirees (mean 3.68), employees (mean 3.97) and those who are not currently working (mean 4.37).⁶⁶ This is

⁶⁵ Panel B notes:

⁽a) Cell values indicate mean difference, followed by the corresponding *t*-value in brackets.

⁽b) *** p < 0.001, ** p < 0.01, * p < 0.10 (2 tail).

⁶⁶ These could be people of any age from about 18 onwards and their perception of tax evasion is different.

consistent with prior research⁶⁷ that it is the opportunity for non-compliance that is associated with a particular occupation that is important. This is noticeably different from the results of the studies conducted by Song and Yarbrough, Birch, Peters and Sawyer, and Devos,⁶⁸ which showed no significant influence of occupation on the respondents' attitudes and behaviour in relation to taxpayer compliance. However, the Birch, Peters and Sawyer sample had only three per cent of respondents who were self-employed and 47 per cent of respondents not currently in paid employment, and the Devos sample also had 61 per cent of respondents who were full-time students. As shown in Appendix 1, age does not appear to have a significant relationship with tax evasion. However, the finding in Panel B of Table 6 that retired people perceive tax evasion as a more severe crime is consistent with the literature,⁶⁹ which suggests that generally older taxpayers are more compliant than younger taxpayers. Birch, Peters and Sawyer⁷⁰ and Devos⁷¹ also found an inverse relationship between age and tax evasion. The Birch, Peters and Sawyer sample had 79 per cent of respondents in the 15–29 age group and less than six per cent of respondents in the 30-39 age group. In the Devos sample, 94 per cent of respondents were in the 15-29 age group.⁷²

⁶⁷ H Robben, D Hessing and H Elffers, 'Legal Controls and Type of Employment in Tax Evasion Behaviour' in S Lea, P Webley and B Young (eds), *Applied Economic Psychology in the 1990s* (1990) vol 1, 512.

⁶⁸ Song and Yarbrough, above n 15; Birch, Peters and Sawyer, above n 42; Devos, 'Pilot Study', above n 45.

⁶⁹ Jackson and Milliron, above n 27; Richardson and Sawyer, above n 3; Westat, above n 15; Richardson, 'Exploratory Study', above n 43.

⁷⁰ Birch, Peters and Sawyer, above n 42.

⁷¹ Devos, 'Pilot Study', above n 45.

 $^{^{72}}$ The sample for the present study had 35 per cent of respondents who were 30 years of age or younger and 31 per cent of respondents in the 31–40 age group.

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	72.048	1	72.048	91.445	.000
Within Groups	244.246	310	.788		
Total	316.295	311			

Table 7: ANOVA of Tax Evasion by IRD Audit

The results reported in Table 7 show a statistically significant difference in perceptions of tax evasion where an income tax return has been audited by the IRD. The average score for the seriousness of tax evasion for taxpayers whose return had been audited by the IRD is 3.91 and for those who had not been audited, the average score is 3.23. The result suggests that those who have had their income tax return audited by the IRD perceive tax evasion as a more serious crime and is consistent with prior studies that taxpayers who have been audited are more likely to assess the probability of audit as higher and consequently decrease their levels of evasion.⁷³

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	17.026	1	17.026	17.636	.000
Within Groups	299.269	310	.965		
Total	316.295	311			

 Table 8: ANOVA of Tax Evasion by Tax Professionals

The results reported in Table 8 show a statistically significant difference in perceptions of tax evasion and status as a tax professional (for example, tax agent or tax preparer). The average score for the seriousness of tax evasion for tax professionals is 2.47 and for others, it is 3.47. The result suggests that tax professionals, compared to others, do not perceive tax evasion as a serious offence.

⁷³ Spicer and Lundstedt, above n 29; Spicer and Hero, above n 33; R Worsham, 'The Effect of Tax Authority Behavior on Tax Compliance: A Procedural Justice Approach' (1996) 18 *Journal of the American Taxation Association* 19.

These findings are consistent with Jackson and Milliron,⁷⁴ who also found that increased knowledge of tax evasion opportunities has a negative influence on tax compliance as it assists non-compliance. It is somewhat disturbing that the results show that survey participants who happened to be tax professionals did not perceive tax evasion as a serious offence. Unfortunately, the number of tax professionals in the sample is too small (6 per cent) to draw a sound conclusion on this variable. It is also possible that, on the basis of their tax return filing and audit experience, the tax professionals may have considered that there is a low probability of audit and detection, and thus consider that the chances of being caught evading income tax are very low. They may have friends who have been known to be non-compliant, and this may have influenced their perception that tax evasion is not a serious offence. Due to the small sample size this may have resulted in a significant relationship with tax evasion. These findings should be of particular concern to revenue collecting authorities. However, Birch, Peters and Sawyer⁷⁵ found that individuals with a taxation qualification are least likely to understate their taxable income.

Table 9: ANOVA of Tax Evasion by English as a FirstLanguage

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	133.370	1	133.370	226.021	.000
Within Groups	182.925	310	.965		
Total	316.295	311			

Table 9 shows a statistically significant difference in perceptions of tax evasion and the respondent's first language. The mean for the seriousness of tax evasion for English as a first language (2.79) is very low as compared to the mean for the 'Other' category (4.10).

⁷⁴ Jackson and Milliron, above n 27.

⁷⁵ Birch, Peters and Sawyer, above n 42.

The result suggests that respondents whose first language is English did not perceive tax evasion as a serious offence. To the author's knowledge no research has been undertaken with respect to first language and tax evasion behaviour. A literature review by Birch, Peters and Sawyer⁷⁶ which used an ethnicity variable found that acceptance for tax evasion behaviour is significantly higher for respondents of New Zealand European ethnicity relative to other ethnicities.

Table 10: ANOVA and Mean Differences

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	16.474	3	5.491	5.641	.001
Within Groups	299.821	308	.973		
Total	316.295	311			

Panel A: ANOVA of Tax Evasion by Location

Panel B: Post Hoc Test Reporting the Mean Difference between Mean Seriousness Scores of Tax Evasion for Pairs of Locations⁷⁷

Location	Central City	North Shore City	Manukau City	Waitakere City	Mean Seriousness Score
Central City		0.078 (0.459)	0.499 (3.670) ^{***}	0.448 (2.524) ^{**}	3.59
North Shore City	0.078 (0.459)		0.420 (2.124) ^{**}	0.369 (1.746) [*]	3.51

- (a) Cell values indicate mean difference, followed by the corresponding *t*-value in brackets.
- (b) *** p < 0.001, ** p < 0.01, * p < 0.10 (2 tail).

⁷⁶ Ibid

⁷⁷ Panel B notes:

Manukau City	0.499 (3.670) ^{***}	0.420 (2.124) ^{**}		0.051 (0.251)	3.09
Waitakere City	0.448 (2.524) ^{**}	0.369 (1.746) [*]	0.051 (0.251)		3.14

The ANOVA results in Panel A of Table 10 show a statistically significant difference in perceptions of tax evasion by location (where a person is domiciled). This suggests that location affects how people perceive the seriousness of tax evasion as a crime. To determine the drivers of this observed difference, a post hoc t-test between different locations was performed. The results in Panel B of Table 10 show an observable difference between different urbanmetropolitan vis-à-vis urban-farming locations. The perceived seriousness of tax evasion was significantly higher in the Central City (urban, high density population) and North Shore City (urban) locations relative to the Manukau City (urban and farming) and Waitakere City (urban and farming) locations.⁷⁸ There was no observed statistical difference within these clusters of locations. The results are consistent with Karlinsky, Burton and Blanthorne,⁷⁹ Ball,⁸⁰ Davis,⁸¹ and Smith and Huff,⁸² suggesting that people's residential location influences their perceptions of the seriousness of tax evasion.

⁷⁸ Under the 2006 census, the population of each of these four suburbs was estimated to be as follows: Central City — 404 658 (10 per cent of the New Zealand population); Manukau City — 328 968 (8.2 per cent of the New Zealand population); North Shore City — 205 605 (5.1 per cent of the New Zealand population); Waitakere City — 186 444 (4.6 per cent of the New Zealand population). The median value for post-high school qualifications is 49.7 per cent in Central City, 34.7 per cent in Manukau City, 47.1 per cent in North Shore City and 38.1 per cent in Waitakere City, compared to 39.9 per cent for all of New Zealand. ⁷⁹ Karlinsky, Burton and Blanthorne, above n 24.

⁸⁰ Ball, above n 50.

⁸¹ J Davis, 'Comparison of Attitudes toward the New York City Police' (1990) 17 Journal of Police Science and Administration 233.

⁸² B Smith and R Huff, 'Crime in the Country: The Vulnerability and Victimization of Rural Citizens' (1982) 10 *Journal of Criminal Justice* 271.

As shown in Appendix 1 of this article, income level, whether a taxpayer hires someone to prepare his or her tax return, marital status, home ownership, religious values and political party membership do not appear to have a significant relationship with tax evasion in the current study. Song and Yarbrough⁸³ found a significant relationship between income level and tax ethics. However, Crane and Nourzad,⁸⁴ Devos,⁸⁵ and Birch, Peters and Sawyer⁸⁶ found a significant positive relationship between income level and tax evasion. It is important to note that 83 per cent of respondents in the Birch, Peters and Sawyer study were in the \$20 000 or low income group, 80 per cent of respondents in the Devos study were in the \$20 000 or low income group, and the Crane and Nourzad sample consisted of individuals who filed amended returns under the California Tax Amnesty programme. The results of this study as they relate to tax return preparation⁸⁷ do not support Westat Inc's findings that, due to lack of knowledge in fiscal and tax matters, taxpayers who prepare their own returns are more likely to be non-compliant.⁸⁸ The marital status result does not support Title's⁸⁹ and Song and Yarbrough's⁹⁰ earlier research findings that single taxpayers are less compliant because they are less risk averse and the tax laws deny them dependant exemptions. The findings of the present study as they relate to home ownership do not appear to support Song and Yarbrough's findings that home owners tend to have a high tax ethics score and believe that their share of the tax

⁸³ Song and Yarbrough, above n 15.

⁸⁴ Crane and Nourzad, above n 36.

⁸⁵ Devos, 'Pilot Study', above n 45.

⁸⁶ Birch, Peters and Sawyer, above n 42.

⁸⁷ Reliance on tax agents or tax professionals by New Zealand taxpayers has decreased since 2000 as under s 33A of the *Tax Administration Act 1994* (NZ), individuals who receive only employment income, a taxable Maori authority distribution from which tax is deducted at source, interest or dividends are not required to furnish tax returns.

⁸⁸ Westat, above n 15.

 $^{^{89}}$ Title, above n 32.

⁹⁰ Song and Yarbrough, above n 15.

burden is relatively fair.⁹¹ There is no study available with which to compare the political party affiliation and religious values results.

An ANCOVA was also conducted because some of the independent variables were correlated with each other. A correlation matrix is contained in Appendix 2 of this article. Table 11 presents the ANCOVA results.

Source	df	Mean Square	F	Sig
Education	1	28.239	84.770	.000
Employment	1	29.287	87.916	.000
Gender	1	22.710	68.173	.000
Married	1	.147	.366	.546
Income	1	2.058	5.116	.024
Age	1	.125	.122	.728
Home	1	.733	.714	.399
Audit	1	12.333	33.622	.000
Language	1	.079	.275	.601
Church	1	1.283	1.338	.248

Table 11: ANCOVA of Tax Evasion by CorrelatedIndependent Variables

Table 11 reveals that the results of the ANCOVA are not significantly different except in one case. Only income has a marginally significant influence on tax evasion. Though the tax agent variable was found to be significantly correlated with many of the independent variables, an ANCOVA was not conducted for this

⁹¹ Ibid.

variable because the number of tax professionals in the sample was too small for a meaningful analysis.

5. LIMITATIONS AND CONCLUSIONS

This study has several limitations. The main limitation arises from the sampling process used. The sample was drawn from only one provincial area of New Zealand. The people who responded to the survey may not be representative of Auckland taxpayers,⁹² but even if they are, it does not necessarily follow that they would be representative of New Zealanders. The random selection of participants alleviates this concern to a significant degree but does not completely rule it out. This study could be extended to other main centres and provincial areas of New Zealand so that results can be compared.⁹³

The second limitation is related to the possibility of participant misunderstanding of the questions and terminology used in the survey instrument.⁹⁴ To address this concern, the questionnaire used in the current study was based on that which was used in the United States study by Karlinsky, Burton and Blanthorne.⁹⁵ However, some modifications had to be made to the questionnaire because the United States legal environment differs from that in New Zealand. Pilot testing of the amended questionnaire alleviated but did not necessarily eliminate potential problems that may have been associated with the questionnaire.

Notwithstanding these limitations, this study investigates for the first time in New Zealand the impact of a comprehensive set of demographic variables on the perceptions of tax evasion as a crime. The demographic variables investigated span employment status, level of education, political affiliation, household income, age, home ownership, marital status, religious background, the hiring or

⁹² Cf n 78, above.

⁹³ Wellington, for example, is where most of the public service is located.

⁹⁴ D Dillman, *Mail and Internet Surveys: The Tailored Design Method* (2nd ed, 2000).

⁹⁵ Karlinsky, Burton and Blanthorne, above n 24.

non-hiring of a tax agent, the respondent being or not being a tax professional, previous auditing of a tax return by the IRD, gender, first language and domicile. This study has made an important contribution to the empirical tax compliance literature in a jurisdiction outside the United States. The findings reveal that the most significant variables that affect tax evasion are: education level, employment status, gender, the audit of an income tax return by the IRD, status as a tax professional, English as a first language and geographical location of the respondent.

The findings suggest that in order to reduce the incidence of tax evasion, the IRD should monitor more closely those who may not perceive tax evasion as a crime. Based on the analysis above, taxpayers with a low level of education, males, the self-employed, those who have not been audited in the past, those whose first language is English and tax professionals should be the focus of efforts for addressing tax evasion.

The results above are based on self-reported perceptions, which may be different from actual tax compliance behaviour. The IRD should determine whether perceptions mirror actual behaviour, and different reasons for such behaviour on the basis of demographics should be investigated. Investigators at the IRD should select at random for audit taxpayers who have the characteristics that have been discussed above. There is a need to create awareness of the penalties for tax evasion and of the resources and capabilities of the IRD to detect this sort of illegal activity. Tax returns should ideally be prepared by qualified tax professionals. The IRD should work together with professionals to create awareness that taxpayers must take responsibility for their own affairs and a realisation that tax evasion is tantamount to 'theft' from the government. A functional state is necessary for a functional society. A functional state requires funding and taxpayers have a personal obligation to contribute to that in the form of a 'fair share' of taxes. People should be made to realise that it is unethical to expect 'someone else' to pay their share. The author is strongly of the opinion that enforcement of the New Zealand tax regime requires greater resourcing.

There is no requirement that tax agents in New Zealand hold any tax qualification or any professional qualification. Any person who carries on a business where tax returns are prepared or who carries on a professional practice and prepares the annual returns for 10 or more taxpayers may become a tax agent. To protect the integrity of the tax system, the IRD may refuse to register a person as a tax agent and may remove a person's registration as a tax agent.⁹⁶

In contrast, to register as a tax agent in Australia, the Australian Tax Agents Board requires compliance with reg 156 of the *Income Tax Regulations 1936* (Cth). Under this regulation, in order to register as a tax agent a person must have completed a relevant qualification in accounting and Australian tax law from an Australian university, a college of technical and further education or an educational institution of equivalent standard, and must have relevant employment experience, which differs depending on the qualifications of the individual. Every tax agent is also required to reapply for registration after three years from the date of registration, otherwise registration ceases automatically.

Therefore, it is proposed that to ensure that New Zealand tax agents are qualified professionals, the IRD should prescribe some accounting and tax law qualifications from New Zealand universities or degree granting polytechnics and require some relevant work experience to qualify for registration as a tax agent. This should be coupled with a re-registration period, such as every three years, to ensure the ongoing quality of registered tax agents. This may increase the integrity level of the tax profession in New Zealand.

This study has helped to clarify the relationship between demographic variables and perceptions of tax evasion, offering additional insight into the demographics of perceptions of tax evasion in New Zealand. The author hopes that this study will encourage further empirical research to understand tax compliance behaviour. Future research in other geographical locations should

⁹⁶ Under s 34B of the TAA 1994, which applies from 19 December 2007.

seek to identify the determinants of tax evasion in order to validate the findings of this study.

Appendix 1

ANOVA of Tax Evasion by Age

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	4.254	4	1.064	1.046	.383
Within Groups	312.041	307	1.016		
Total	316.295	311			

ANOVA of Tax Evasion by Income

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	2.289	4	.572	.560	.692
Within Groups	314.006	307	1.023		
Total	316.295	311			

ANOVA of Tax Evasion by Marriage

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	3.970	1	3.970	3.940	.048
Within Groups	312.325	310	1.008		
Total	316.295	311			

ANOVA of Tax Evasion by Tax Return Preparation

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	.091	1	.091	.089	.766
Within Groups	316.204	310	1.020		
Total	316.295	311			

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	.288	1	.288	.283	.595
Within Groups	316.006	310	1.019		
Total	316.295	311			

ANOVA of Tax Evasion by Home Ownership

ANOVA of Tax Evasion by Political Party Affiliation

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	5.462	5	1.092	1.075	.374
Within Groups	310.833	306	1.016		
Total	316.295	311			

ANOVA of Tax Evasion by Religious Values

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	.004	1	.004	.004	.948
Within Groups	316.291	310	1.020		
Total	316.295	311			