Perceptions of Tax Fairness and Tax Compliance Behaviour: A Comparative Study

(Persepsi Kesaksamaan dan Gelagat Pematuhan Cukai: Satu Kajian Perbandingan)

Natrah Saad
(School of Accountancy, College of Business Universiti Utara Malaysia)

ABSTRACT

This cross-cultural study compares the perceptions of tax fairness of New Zealand and Malaysian individual taxpayers of their respective national income tax systems and investigates the consequences of those taxpayers' perceptions of tax fairness, as well as other important variables, on their compliance behaviour. The hypotheses of the study were tested using the responses to a questionnaire survey. A t-test and Partial Least Squares analyses were used to analyse the survey data. The results suggest that Malaysian taxpayers have significantly better perceptions of fairness of their income tax systems than their New Zealand counterparts. However, New Zealand taxpayers were found to be more compliant regarding their tax responsibility. The most important factor in explaining taxpayers' compliance behaviour between the two countries was the attitude of individuals towards compliance, followed by subjective norms. Perceptions of tax fairness, which were highly influenced by both tax knowledge and the perceived complexity of the tax system, was influential in explaining tax compliance.

ABSTRAK

Kajian perbandingan ini membandingkan persepsi pembayar cukai individu di New Zealand dan Malaysia terhadap kesaksamaan sistem cukai pendapatan, serta meneliti kesan persepsi tersebut bersama dengan pemboleh ubah lain ke atas gelagat kepatuhan. Hipotesis kajian diuji menggunakan analisis ujian t dan Separa Kuasa Dua Terkecil menggunakan maklum balas kepada borang kaji selidik. Hasil kajian menunjukkan pembayar cukai di Malaysia mempunyai pandangan yang lebih positif terhadap kesaksamaan sistem cukai di Malaysia berbanding persepsi pembayar cukai di New Zealand terhadap sistem cukai mereka. Bagaimanapun, pembayar cukai di New Zealand lebih patuh terhadap tanggungjawab cukai mereka berbanding pembayar cukai di Malaysia. Hasil kajian juga menunjukkan bahawa faktor yang paling konsisten dalam mempengaruhi gelagat kepatuhan di kedua-dua buah negara adalah sikap terhadap pematuhan cukai, diikuti oleh norma subjektif. Persepsi kesaksamaan yang dipengaruhi oleh pengetahuan cukai dan kompleksiti sistem cukai, merupakan faktor mempengaruhi gelagat kepatuhan cukai.

Keywords: Tax Fairness; Tax Compliance Behaviour; Tax Complexity; Malaysian Tax System; New Zealand Tax System; Land and Income Tax Assessment

INTRODUCTION

The role of the perceptions of tax fairness in influencing tax compliance behaviour has been widely discussed by concerned parties around the globe. Previous studies generally suggest that taxpayers will be more likely to comply when the tax system of that country is perceived to be fair. In addition to perceptions of tax fairness, other factors have also been recognized as important determinants of tax compliance behaviour, including the taxpayers' knowledge of the country's tax system, the complexity of the tax system and the attitude of individuals towards compliance. Having said that, this study investigates how taxpayers in New Zealand and Malaysia perceive the fairness of their respective income tax systems and how such perceptions – together with their knowledge of the income tax system, the complexity of their national income tax systems, and the attitude towards compliance – influence tax compliance behaviour.

Although various studies have been conducted on the issue of tax compliance behaviour, this study differs in several manners. First, this comparative study considers the tax systems of Malaysia and New Zealand, which have rarely been examined in the context of perceptions of tax fairness and tax compliance. To the researcher's knowledge, only two such studies that have been conducted in this area regarding New Zealand. The first study was conducted by Hasseldine, Kaplan and Fuller (1994), who find that New Zealanders perceived the tax system (with respect to the period being studied) as unfair. The findings of their study may not be applicable in the current period since the New Zealand tax system has gone through several reviews and revisions since 2000. Another study by Tan (1998), which focuses on the demographic background of New Zealanders, showed a high correlation between perceptions of tax fairness and the level of income earned. These two studies, however, did not investigate the association between perceptions of tax fairness and compliance behaviour. The research gap also exists in the case of Malaysia. The two studies that were performed in Malaysia (Azmi & Perumal 2008; Mustafa 1996) were confined to the dimensions of the taxpayers' perceptions

of tax fairness with no further investigation regarding the effects on the compliance behaviour of taxpayers.

Second, unlike previous studies which focus on the direct influence of tax knowledge and tax complexity on compliance behaviour, this study draws attention to the perceptions of tax fairness, together with the attitude and elements of the Theory of Planned Behaviour (TPB) (Azjen 1985) as the main independent variables, while also considering tax knowledge and tax complexity as mediating variables. Finally, this study adopts the established behavioural theory of TPB as a means to explain tax compliance behaviour. Such an attempt has not been specifically explored in previous studies relating to tax compliance behaviour.

While the popularity concerning comparative studies in tax compliance area is growing, it is important to highlight the rationale of the selection of the countries of New Zealand and Malaysia in this study. The efficiency of the tax system in New Zealand has been recognised by the Organization for Economic Co-operative Development (OECD). The OECD (2007) also provides the taxation benchmark for Malaysia and other countries in the ASEAN region. Secondly, New Zealand implemented the self-assessment system (SAS) much earlier than Malaysia. Given the different length of experience with the SAS, it is of considerable interest to determine whether there are any differences in the perceptions of tax fairness and compliance behaviour among their individual taxpayers of the two countries. Thirdly, the level of noncompliance behaviour, especially in Malaysia, provides a valid reason to investigate taxpayers' perceptions of tax fairness and the effects on compliance behaviour. Finally, the use of data from both Malaysia and New Zealand data will provide a basis for future research concerning tax compliance behaviour in other Asian countries.

The findings of this study are expected to update information about the taxpayers' perceptions of tax fairness and compliance behaviour in both countries. For example, when improving the present tax systems, tax authorities in the respective country may need information on the current level of a specific dimension of perceptions of tax fairness. Accordingly, this study is designed in such a way that it is oriented towards problem-solving research capable of resolving individual issues identified rather than overhauling the entire income tax system. Information about the possible influences of the perceptions of tax fairness, attitude, subjective norms and perceived behavioural control on the taxpayers' compliance behaviour will be useful for tax authorities to plan and develop relevant and appropriate mechanisms to improve compliance among the taxpayers. Information about taxpayers' level of knowledge and their perceived complexity of the income tax systems may also help the tax authorities to develop tax education syllabuses and design tax simplification programmes that are more user-friendly. In short, the findings from this study are expected be helpful in assisting policy makers, particularly tax

authorities, in reviewing and modifying their current tax systems that will improve voluntary tax compliance.

The remainder of this study is organized as follows: Section 2 provides an overview of the income tax systems in New Zealand and Malaysia, while Section 3 reviews the existing literature on the topic for the basis to develop the relevant hypotheses. Section 4 presents the data and methodology. Section 5 reports and discusses the results and Section 6 concludes and discusses the implications of the study.

OVERVIEW OF THE INCOME TAX SYSTEMS AND COMPLIANCE BEHAVIOUR

New Zealand income tax legislation was first enacted in 1891 through the Land and Income Tax Assessment Act 1891. The applicable tax rates were then set at six pence for a pound (2.5%) on taxable income up to £1,000, after an initial £300 exemption, and one shilling for a pound (5%) for the remaining balance (Committee of Tax Experts 1998). These two-tier tax scales were revised several times and the tax structure came to settle at a minimum of 10.5 percent and a maximum of 33 percent, with no tax-free threshold in the year 2010. The SAS has been formally implemented in New Zealand since 1998 (Committee of Tax Experts 1998). As expected with a voluntary tax system, New Zealand has been facing noncompliance problems. For instance, in the 2006/07 period, the Inland Revenue Department (IRD) prosecuted 705 taxpayers for failing to file tax return forms. In addition, assessments worth NZ$716 million were raised by the IRD in the absence of tax returns filed by taxpayers. Another NZ$128 million was identified as discrepancies due to tax evasion (New Zealand Inland Revenue 2007). The situation indicates that the issue of the voluntary tax noncompliance among taxpayers in New Zealand is still a major concern for New Zealand tax authorities.

The income tax system in Malaysia commenced in 1948, much later than the New Zealand tax system, while the country was still known as Malaya and under the British colonisation and administration. Since the inception of the taxation system, Malaysia has traditionally adopted an official assessment system (OAS) which requires taxpayers to furnish relevant information pertaining to their annual incomes and expenses to the Inland Revenue Board (IRB). Under this system, the responsibility to compute the tax payable rests with the IRB since taxpayers were assumed to have limited knowledge on taxation. However, SAS has been gradually implemented since 2001. Following the full implementation of the SAS in Malaysia in 2005, the percentage of collection of individual income tax over direct taxes dropped by two percent (amounting to RM0.75 billion) from the previous year, and dropped by a further two percent in 2006 (Inland Revenue Board of Malaysia 2005, 2006). In addition, a report by the IRB revealed that between 24 to 35 percent of individual taxpayers failed

to submit their tax return forms between 2004 and 2006. Furthermore, the number of individuals being severely penalized (such as being banned from leaving the country and declared bankrupt) for their failure to pay income taxes also increased between 2004 and 2006 (Inland Revenue Board of Malaysia 2004, 2005, 2006). The situation indicates that noncompliance behaviour was 'alarming' in Malaysia during those years.

Overall, both New Zealand and Malaysia share a common problem of non-compliance behaviour among their taxpayers. However, the reasons for such noncompliance have yet to be explored and the determination of the relevant factors is the focus of this study.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

PERCEPTIONS OF TAX FAIRNESS

Contemporary literature considers tax fairness in a variety of dimensions, including horizontal fairness, vertical fairness, exchange fairness, administrative fairness, retributive fairness and personal fairness. Yet, the various dimensions of fairness are rarely addressed in one study. For instance, when considering tax fairness in Australia, McKerchar (2003) focuses only on personal fairness, while Gilligan and Richardson (2005) consider four dimensions of fairness, namely general fairness, special provisions, tax rate fairness and personal interest. In relation to Dutch taxpayers, Verboon and Dijke (2007) measure fairness in terms of distributive fairness. Similarly, Hasseldine et al. (1994) chooses to consider only general fairness in relation to the New Zealand taxation system.

In contrast to previous studies, the present study considers perceptions of tax fairness as a multidimensional concept that includes general fairness, exchange fairness, horizontal fairness, vertical fairness, retributive fairness, personal fairness and administrative fairness. General fairness (also referred to as overall fairness) simply measures the individuals' judgments on whether or not the income tax system is generally fair. Exchange fairness represents the exchange of contribution and benefit between the taxpayers and the government. This dimension of tax fairness holds that taxpayers will have fair perceptions of the income tax system if the benefits received from the government are equitable compared to their contributions. Meanwhile, horizontal fairness recommends that, for an income tax system to be perceived as fair, taxpayers in similar economic positions should pay the same amount of tax. Vertical fairness, on the other hand, asserts that taxpayers in different economic situations should be taxed at different rates. While retributive fairness is concerned with the fairness of punishments imposed, personal fairness relates to a taxpayer's perception of whether or not the income tax system is favourable to him or her. Finally, administrative fairness relates to the content of the tax laws and procedures employed by the tax authorities.

With regard to the level of general fairness perceptions, a comparative study (which is not related to tax) undertaken in Singapore and China observes how people across different regions form their fairness judgments and finds that people in a more developed region and living in a more competitive society were more tolerant to social unfairness (Zhiyong & Qingyang 2007). However, the research also suggests that, in the case of an environment filled with reward and punishment (where the income tax system can be considered as one of the legalized environments, with various penalties), such perceptions of fairness remain approximately the same, irrespective of the regions and economic backgrounds. While such a contention is yet to be tested in the presentstudy, a comparative study conducted in Hong Kong and Australia (Gilligan & Richardson 2005) finds that taxpayers from different countries have different levels of perceptions of tax fairness towards their respective income tax systems. However, it is important to note that such differences were expected because of the markedly different tax systems between these two countries. Richardson (2005) explains that, unlike Australia, the tax system in Hong Kong is based on a flat tax rate structure; has no withholding tax; is not a self-assessment system; and imposes no tax on dividend and interest incomes.

With regard to New Zealand and Malaysia, few studies have been conducted that independently explore taxpayers' perceptions regarding tax fairness and compliance behaviour. In a study of tax fairness in New Zealand in 1994, Hasseldine et al. (1994) find that taxpayers had completely perceived the system to be unfair. However, a later study conducted by Tan (1998) concludes that the taxpayers in New Zealand perceive that their income tax system as quite fair. The results of this study partially indicate that the country's income tax system has improved. However, a 2008 survey of Malaysian taxpayers, on the other hand, indicates that taxpayers perceived the income tax system as moderately fair (Azmi & Perumal 2008). While these findings may provide some evidence of the levels of perceptions of tax fairness across countries, a direct comparison may not be appropriate due to the differences in time periods, as well as the measures and methods used in each study. Based on the limited literature available, it is proposed that the first hypothesis be:

H_1: There is no significant difference in the perceptions of tax fairness between the New Zealand and Malaysian taxpayers of their current income tax systems.

TAX COMPLIANCE

In the present study, tax compliance is assumed to take place when a taxpayer files all required tax returns at the proper time annually and these returns accurately report tax liability in accordance with the tax laws applicable at the time at which the return is filed (Roth, Scholtz & Witte 1989). With regard to the level of tax compliance, a few cross-cultural studies have been published to date with

interesting findings. For instance, a cross-cultural study between Hong Kong and Australia found that Australian taxpayers were generally more compliant than the Hong Kong taxpayers (Richardson 2005). However, when compared to the US and Singapore taxpayers, Australian taxpayers were found to be the least compliant, with Singaporean taxpayers having the lowest noncompliance rate at 26 percent, while Australian taxpayers having the highest noncompliance rate at 45 percent (Bobek, Robin & John 2007).

A more comprehensive study on tax compliance, conducted by Belkaoui (2004), utilises a compliance index that ranges from 0 to 6, where higher scores indicate higher compliance. The study, considering compliance in 30 countries, ranked New Zealand as the second most compliant nation after Singapore, while Malaysia was ranked at eighth place, after the US. To our knowledge, this is the only cross-cultural study that has included both New Zealand and Malaysia in the analysis. The present study is expected to verify whether or not New Zealand taxpayers are more compliant than Malaysian taxpayers. Having said that, this study proposes the following hypothesis:

H$_2$: There is no significant difference in the levels of tax compliance between New Zealand and Malaysian taxpayers.

PERCEPTIONS OF TAX FAIRNESS AND TAX COMPLIANCE

Since the 1970s, numerous studies have been undertaken to observe the role of perceptions of tax fairness in tax compliance behaviour (e.g., Efebera et al. 2004; Etzioni 1986). However, these studies provided mixed and inconclusive findings. While some researchers found a positive association between the two variables (Harris 1989; Roberts 1994), others could not support such findings (Coleman 1997; Porcano 1988). In fact, some studies indicated that there was a negative relationship between perceptions of tax fairness and compliance behaviour (Lempert 1992). Richardson and Sawyer (2001) contend that such mixed findings are probably due to the different definitions of perceptions of tax fairness used in these studies.

As far as New Zealand and Malaysia are concerned, there are few previous studies that have focused on these countries, making it difficult to draw a conclusion about such a relationship. To our knowledge, there has only been one study conducted in New Zealand (Hasseldine et al. 1994) and one study conducted in Malaysia (Mustafa 1996) that have examined the effect of perceptions of tax fairness on compliance behaviour. However, both were conducted some time ago. Moreover, mixed findings of this subject documented elsewhere suggested that this relationship can be hypothesized as follows:

H$_3$: Perceptions of tax fairness of the respective income tax systems by New Zealand and Malaysian taxpayers significantly influence their tax compliance behaviour.

THEORY OF REASONED ACTION, THEORY OF PLANNED BEHAVIOUR AND COMPLIANCE BEHAVIOUR

Previous studies suggest two basic approaches to review the problem of compliance: the economic deterrence approach and the behavioural approach (James & Alley 2002). The former tends to analyze compliance in terms of economic costs and incentives, while the latter examines behaviour using approaches drawn from the disciplines of psychology and sociology. While the focus of the economic deterrence approach is efficiency in resource allocation, the behavioural approach frequently focuses on fairness (James & Alley 2002). Based on this distinction, the use of the behavioural approach is particularly relevant in this study. The two dominant theoretical frameworks used in explaining human behaviour (Azjen 1991) are the Theory of Reasoned Action (TRA) and the Theory of Planned Behaviour (TPB).

A review of the two theories suggests that the TRA model depicts behavioural intention as the immediate determinant of the actual behaviour. Behavioural intention is, in turn, determined by attitude towards behaviour and subjective norms. In other words, the TRA model suggests that individuals have complete volitional control over their behaviours and their decisions are made according to their will or intention. This assertion may hold true to some routine and fully volitional decisions, such as quitting smoking, purchasing particular brands, and performing regular exercises. Arguing that not all behaviours are under a complete volitional control, Azjen (1985) developed an extended model of the TRA model, which is known as TPB. In the TPB model, Azjen (1985) proposes a new construct to measure the individual's perception of how easy or difficult to perform the behaviour, known as perceived behavioural control. In short, TPB suggests that one's motivation to perform a particular behaviour is also influenced by the individual's perception of how easy or difficult the behaviour is to be performed, in addition to his/her attitudes towards the behaviour and subjective norms. Some examples that have successfully applied the TPB in predicting behaviours include speeding (Paris & Broucke 2008), adolescent smoking (Guo et al. 2007), and cardiopulmonary resuscitation (CPR) involvement (Dwyer & Williams 2002).

In the context of tax compliance behaviour, taxpayers' intentions to comply (or not) do not simply depend on their will. Individuals may wish to comply, but finally decide not to when they encounter difficulties to perform such behaviour as this hurdle subsequently limits their volitional control. Based on previous studies, various factors are reported to significantly affect tax compliance behaviour, including tax complexity, tax knowledge, probability of detection and ethics (Richardson & Sawyer 2001). This demonstrates that tax compliance behaviour is not simply a trivial choice, but the result of decisions made by individuals (whether or not to comply) premised upon the presence or absence of resources, opportunities and barriers. Having said that, we believe that tax compliance

is more likely to fall under incomplete volitional control. Thus, we argue that TPB model, rather than the TRA model, is more appropriate in predicting tax compliance behaviour. In fact, Bobek and Hatfield (2003) had applied the TPB model with the inclusion of the moral obligation variable in their study.

Attitudes towards behaviour reflect feelings of favour and disfavour towards a particular behaviour (Azjen 1991). In the context of this study, an attitude towards behaviour refers to one's evaluation of whether or not they will comply with their tax obligations. This evaluation is made based on the outcome of whether complying with tax laws would be favourable or unfavourable to them. Previous studies done overseas on the association between attitude towards compliance and compliance behaviour have established a positive link between attitude and compliance behaviour. This is consistent with the premise under the TPB model that a favourable attitude towards behaviour will more likely affect behaviour in a positive way. In New Zealand and Malaysia, however, little has been done to investigate this relationship. While Loo, McKerchar and Hansford (2008, 2009) have investigated such a relationship in Malaysia via a mixed method approach, the findings were mixed. This study, therefore, proposes as the fourth hypothesis:

H_4: Attitude towards compliance of the New Zealand and Malaysian taxpayers significantly influences their tax compliance behaviour.

Subjective norms reflect the motivation of the individual to conform to significant referent groups in deciding whether or not to comply with tax obligations. Referent groups refer to individuals whom taxpayers normally compare or refer to, which may include family members, friends and colleagues. In terms of the effect of subjective norms on compliance behaviour, mixed findings have been documented. Some studies (e.g., Bobek et al. 2007; Elffers, Weigel & Hessing 1987; Hanno & Violet 1996) have found a positive relationship between these two variables while others, such as Kirchler, Niemirowski and Wearing (2006), have failed to establish a significant relationship. In New Zealand and Malaysia, to our knowledge, no prior study is available. To investigate such a relationship, this study proposes as the fifth hypothesis that:

H_5: Subjective norms of the New Zealand and Malaysian taxpayers significantly influence their tax compliance behaviour.

Perceived behavioural control reflects an individual's perception of the ease or difficulty in performing a particular behaviour. Azjen (1991) stipulates that a behaviour that is easy to perform is high in perceived behavioural control while one that is difficult to perform is low in perceived behavioural control. Furthermore, Azjen (1991) suggests that an individual with a high perceived behavioural control will be more likely to perform the

behaviour in comparison with an individual with a lower perceived behavioural control. In tax compliance behavioural research, when a taxpayer believes that he/she can successfully complete and file the tax return forms with the IRB without any errors, that taxpayer seems to have a high perceived behavioural control and is more likely to comply with his/her tax obligations. Likewise, if a taxpayer believes that he/she can avoid or evade paying tax without being caught by a tax audit, then that person also seems to have a high perceived behavioural control over noncompliance and, thus, is more likely to avoid or evade paying tax. In this study, we are interested in the respondents' perceived behavioural control over noncompliance with tax obligations. In particular, it is anticipated that the higher the perceived behavioural control, the more likely that the taxpayers would not be compliant. It is therefore proposed as the sixth hypothesis that:

H_6: Perceived behavioural control of New Zealand and Malaysian taxpayers significantly influences their tax noncompliance behaviour.

TAX KNOWLEDGE AND PERCEPTIONS OF TAX FAIRNESS

A review of the literature on the effect of tax knowledge on the perceptions of tax fairness provides a strong support to the argument that possession of adequate knowledge of the income tax system will improve the taxpayers' perceptions of tax fairness (Christensen, Hite & Roberts 2000; Fallan 1999; Maroney, Rupert & Wartick 2002; Schisler 1995). Contradictory evidence, however, was documented in Malaysia where an increase in taxpayers' knowledge has negatively impacted perceptions of tax fairness (Loo et al. 2008). In particular, the findings suggest that taxpayers who had an adequate knowledge of government expenditure for public benefits would view the income tax system to be unfair as they were not receiving sufficient benefits in return for their taxes paid. In New Zealand, on the other hand, no evidence of the impact of tax knowledge on perceptions of tax fairness has been documented to date (Tan & Chin-Fatt 2000).

The fact that findings reported in New Zealand and Malaysia are inconsistent with findings in other countries may be attributed to the different measures and methods used in the respective studies. However, the present study considers three aspects of tax knowledge: general knowledge, technical knowledge and legal knowledge. General knowledge relates to a broad knowledge of the income tax system, such as its purpose and the tax structure. Technical knowledge considers the taxpayers' ability to complete and file their tax return forms. Legal knowledge emphasizes the taxpayers' knowledge on the regulation aspects of the income tax system, such as legal sanctions. These three dimensions of tax knowledge are evaluated to determine the overall knowledge of taxpayers

regarding the income tax system, where the impact on perceptions of tax fairness is consequently investigated in this study using the seventh hypothesis:

H_7: Knowledge of the nation's income tax system significantly influences taxpayers' perceptions of tax fairness in New Zealand and Malaysia.

TAX COMPLEXITY AND PERCEPTIONS OF TAX FAIRNESS

Tax complexity arises as a result of an increased sophistication in the tax laws (Richardson & Sawyer 2001) and can take many forms, including computational complexity, forms complexity, compliance complexity, rule complexity and procedural complexity. Notably, the topic of income tax system complexity has been widely discussed in the tax compliance literature. However, only a few studies (Carnes & Cuccia 1996; Carroll 1987; Kirchler et al. 2006) investigate the relationship between tax complexity and perceptions of tax fairness. These studies, which documented an inverse relationship between tax complexity and perceptions of tax fairness, were conducted mainly in the US and none were carried out in either New Zealand or Malaysia.

In the absence of empirical evidence, the proposition that tax complexity influences perceptions of tax fairness needs to be examined. To do so, this study separates tax complexity into compliance complexity and content complexity. Compliance complexity is concerned with the process of keeping records, filling and filing tax return forms and making tax payments. Content complexity, on the other hand, relates to the complexity of the documents and relevant tax laws. These two dimensions of tax complexity are then integrated to investigate the proposition in the eighth hypothesis:

H_8: Complexity of the nation's income tax system significantly influences taxpayers' perceptions of tax fairness in New Zealand and Malaysia.

DATA AND METHODOLOGY

A tax survey questionnaire (which had previously been pilot-tested on postgraduate students and individual taxpayers in both New Zealand and Malaysia) was administered to 2,267 individual taxpayers in each country. In New Zealand, the questionnaires were mailed to potential respondents who were systematically selected from the 2008 Electoral Roll. Meanwhile, in Malaysia, the sample was selected from twelve government agencies and six private entities in every state and from one federal territory in Peninsular Malaysia. The questionnaire sets

were distributed to potential respondents with the help of the Human Resource Personnel in their respective organizations in Malaysia. However, different modes of conducting surveys among two different populations have been recognized in Dillman (2007) as a possible approach to collecting data, provided there was no face-to-face meeting between the researcher and the sample. In both countries, involvement in the survey was entirely voluntary. From the distributed questionnaires, 1150 were returned for a response rate of 25.35 percent. The final sample with usable data consists of 1071 questionnaires, 79.55 percent of which were Malaysian taxpayers. The survey questionnaire included four sections: perceptions of tax fairness; tax knowledge and tax complexity; compliance hypothetical scenario; and demographic information.

Overall, 20 items in the questionnaire were used to measure the perceptions of tax fairness. 14 items on the questionnaire were newly-developed, while the remaining six items were adapted from Gilligan and Richardson (2005). The items were scaled in such a way that a higher score would reflect a fairer perception. Nine items to measure tax knowledge were developed based on the various definitions available in previous studies done overseas. These items represent general knowledge, technical knowledge and legal knowledge. To measure tax complexity, seven items were developed measuring both compliance and content complexity. Tax knowledge was coded so that a higher score would reflect a higher level of tax knowledge. Tax complexity, on the other hand, was scaled so that a higher score would correspond to a lower level of tax complexity.

For compliance behaviour, a hypothetical tax scenario relating to understating other incomes was developed. Following the scenario, 17 statements relating to the TPB variables (intention, attitude, subjective norms and perceived behavioural control) were generated and the potential respondents were requested to express their opinions on these statements. Intention, attitude and subjective norms were scaled so that a higher score would correspond to a higher compliance with tax obligations. Perceived behavioural control, on the other hand, measured control over noncompliance with tax obligations and was scaled so that a higher number score would reflect a higher control over noncompliance.

All items were developed based on the 7-point Likert's Scale, from strongly disagree (1) to strongly agree (7). In the final section of the questionnaire, respondents were asked to provide demographic background information, such as age, gender, education level, income level and filing experience. This information is summarised in Table 1.

TABLE 1. Summary of demographic data

Variables	New Zealand		Malaysia	
	Responses[a]	Percentage	Responses[a]	Percentage
Age				
Under 30	21	9.0	132	14.4
30 – 39	41	17.7	292	31.8
40 – 49	51	22.0	320	34.9
50 – 59	49	21.1	172	18.8
60 or over	70	30.2	1	0.1
Total	232	100.0	917	100.0
Gender				
Male	109	47.2	458	49.9
Female	122	52.8	459	50.1
Total	231	100.0	917	100.0
Level of Education				
Secondary school or lower	112	49.1	322	35.1
Diploma or degree	90	39.5	453	49.4
Masters or PhD	26	11.4	142	15.5
Total	228	100.0	917	100.0
Annual Income[b]				
30,000 or less	70	30.7	–	–
30,001 – 40,000	27	11.8	428	47.7
40,001 – 50,000	27	11.8	210	23.4
50,001 – 60,000	29	12.7	94	10.5
60,001 – 70,000	17	7.5	67	7.5
More than 70,000	58	25.5	98	10.9
Total	228	100.0	897	100.0
Filing Experience				
Never	18	7.7	146	16.8
Once	10	4.3	67	7.7
2 – 5 times	36	15.5	157	18.0
More than 5 times	169	72.5	501	57.5
Total	233	100.0	871	100.0

Notes: [a] The total responses are not consistent due to an incomplete data for some categories. [b] Annual income is in respective currency (New Zealand – NZ$; Malaysia – RM)

RESULTS AND DISCUSSION

A *T*-TEST ANALYSIS

In order to determine whether there was any significant difference in the perceptions of tax fairness and compliance behaviour between New Zealand and Malaysian taxpayers, an independent sample *t*-test was performed. The summary of the results is set out in Table 2. Based upon the results, the hypothesis was rejected as the results of the study suggest that the perceptions of tax fairness among New Zealand and Malaysian taxpayers were significantly different. The only dimension of tax fairness that taxpayers in both New Zealand and Malaysia similarly perceived was the retributive fairness.

TABLE 2. Perceptions of tax fairness and compliance behaviour,
New Zealand versus Malaysia

Measures	Mean		*P*-value (two-tailed)
	New Zealand n = 219[a]	Malaysia n = 852[a]	
General fairness	3.60	4.23	.000
Exchange fairness	3.65	4.42	.000
Horizontal fairness	5.39	4.03	.000
Vertical fairness	4.38	5.16	.000
Retributive fairness	4.58	4.60	.716
Personal fairness	4.71	4.93	.005
Administrative fairness	3.86	4.62	.000
Compliance behaviour	5.83	4.67	.000

Notes: [a] This is the final sample used for the analysis after deleting some responses with missing data

Other than indicating the difference between countries, the mean values in Table 2 also suggests that both New Zealand and Malaysian taxpayers perceive their income tax systems as moderately fair. These findings provided support (to a certain degree) previous studies conducted in Malaysia and New Zealand conducted by Azmi and Perumal (2008) and Tan (1998), respectively. The mean values also suggest that the Malaysian taxpayers have better perceptions of tax fairness regarding their income tax system than their New Zealand counterparts. The only case where New Zealand taxpayers had better perceptions than Malaysian taxpayers was in terms of horizontal fairness. A possible explanation for the relatively lower perceptions of tax fairness among New Zealanders (relative to the Malaysian counterpart) could be due to the fact that the tax system contains no tax-free threshold, available for low-income earners in that country. In other words, everyone who earns an income is liable to tax. Family benefits and assistance are available to this group, but these involve additional administration costs to process because departments other than the IRD are involved. In this instance, the tax practice in Malaysia might be more cost efficient because certain tax-free thresholds are given together with other forms of tax relief. It is also interesting to note that New Zealand also imposes a goods and services tax of 15 percent. This consumption tax is an additional burden to low-income and middle-income earners, resulting in lower perceptions of tax fairness in New Zealand.

Table 2 also presents the mean values of the taxpayers' compliance behaviour, which were used to test Hypothesis 2 which infers whether or not taxpayers in both New Zealand and Malaysian have the same levels of tax compliance. The results provide no support for Hypothesis 2, which means that there is a significant difference in the levels of tax compliance between New Zealand and Malaysian taxpayers. The mean values generally indicate that the New Zealand taxpayers were more compliant when compared with Malaysian taxpayers. The findings were consistent with that of Belkaoui (2004), which determined New Zealand as the second most compliant nation, while ranking Malaysia as eighth in the sample. In that study, tax compliance was also measured using a tax compliance index ranging from 0 to 6, with higher scores indicating higher compliance. One possible explanation could be the stringent penalties imposed by the IRD on the non-compliant taxpayers in New Zealand. This might have been attributable to the lengthier experience of the IRD, which has utilized the SAS for nearly fifteen years.

REGRESSION ANALYSIS

To examine the association of variables under study, a regression analysis using a Partial Least Squares (PLS) was carried out in accordance with the approach utilised by Chin (1998). The PLS was used in this study due to its ability to perform the path analytic model with latent variables. While the co-variance based Structural Equation Modelling (SEM) has the same ability, the PLS was preferred in this study for several reasons. First, the PLS provides a better prediction capability (Chin 1998; Chin, Marcolin & Newsted 2003; Chin & Newsted 1999) which suited the objective of this study. Secondly, the data distribution in this study did not follow a multivariate normal distribution. Normally distributed data is required under the covariance-based SEM, but not under the PLS approach. Thirdly, several constructs in this study were measured in the formative mode, which could be accommodated in the PLS model, but not in the covariance-based SEM. Finally, the use of the PLS seemed more appropriate in this study since most of the measures used were newly developed.

Prior to analysing the structural model, several statistical analyses were performed. To ensure that there was no non-response bias, a *t*-test analysis was carried out by comparing early responses to responses generated after the follow-up. No significant differences were found between the two groups (in both countries), as there was no evidence of any non-response bias. Similarly, a comparison between population and survey responses in demographic background information also indicated that the responses were (to a certain degree) representative of the total population of individual taxpayers in both countries.

Firstly, to confirm the validity and reliability of the measurement model, the weight scores and the respective t-values of the formative constructs (general fairness, retributive fairness, administrative fairness, general knowledge, technical knowledge and content complexity) were found to be significant and, therefore, deemed valid. Secondly, the indicator loadings and average variance extracted (AVE) were used to confirm the validity of the reflective constructs (i.e. exchange fairness, horizontal fairness, vertical fairness, personal fairness, legal knowledge, compliance complexity, intention, attitude, subjective norms and perceived behavioural control). All constructs met the required loading of at least 0.707 (Chin 1998) and an AVE of 0.5 (Bagozzi & Yi 1988). Thirdly, the reliability of the formative constructs was assessed based on the variance inflation factor (VIF) and the condition index, which were below the threshold levels of 3.3 and 30 respectively. These suggested that there were no multicollinearity problems. Finally, the internal consistency scores provided values greater than the minimum value of 0.7 (Chin 1998), confirming the reliability of the reflective constructs. Overall, the results showed that the constructs were reliable, valid and appropriate in both the New Zealand and Malaysian environments.

TABLE 3. R-squared and path coefficients in the structural model

Propositions	New Zealand ($R^2 = 0.740$)			Malaysia ($R^2 = 0.652$)		
	Coeff.	t	Sig.	Coeff.	t	Sig.
Effects of … on Intention to Comply						
Perceptions of tax fairness	0.071	1.612	0.100	0.080	3.531	0.005
Attitude	0.468	8.117	0.005	0.393	9.534	0.005
Subjective norms	0.345	6.724	0.005	0.394	9.111	0.005
Perceived behavioural control	-0.159	2.939	0.005	-0.044	1.547	0.100
Effects of … on Perceptions of Tax Fairness						
Tax knowledge	0.346	5.057	0.005	0.460	12.923	0.005
Tax complexity	0.420	5.207	0.005	0.251	6.771	0.005

Table 3 presents the results of the structural model. The R^2 values for New Zealand and Malaysia for the intention to comply (proxy for compliance behaviour) indicate that the model accounts for 74 and 65.2 percent, respectively, of the variance of the construct. In particular, this result suggests that the perceptions of tax fairness, attitude, subjective norms and perceived behavioural control could explain more than 50 percent of the taxpayers' decision to comply in both environments. This finding has been a considerable improvement over the reported R^2 in Bobek (1997), who also studied the determinants of non-compliance behaviour. Other than the R^2, Table 3 also presents the path coefficients on the variables under study. The positive path coefficients between the perceptions of tax fairness and intention to comply in the New Zealand and Malaysian environments indicate that respondents in both countries were of the opinion that a better perception of fairness would motivate them to comply with tax obligations. The links which were significant in both environments (at a conventional level in the case of New Zealand) suggest that Hypothesis 3, which proposes that '*Perceptions of tax fairness of their respective income tax systems by the New Zealand and Malaysian taxpayers significantly influence their tax compliance behaviour'*, should be accepted. Furthermore, these results also support findings in previous studies (Harris 1989; Roberts 1994).

The path coefficients from attitude with the intention to comply were moderately high at 0.468 and 0.393 in New Zealand and Malaysia, respectively. Both coefficients were significant at the 0.005 level. Hence, Hypothesis 4, which states '*Attitude towards compliance of the New Zealand and Malaysian taxpayers significantly influences their tax compliance behaviour'* was accepted. Furthermore, the values of the path coefficients in both environments are higher than the other coefficients, indicating a greater influence of attitude on intention to comply. This finding was consistent with the study by Cullis and Lewis (1997) who concluded that attitude – together with the values, perceptions and morals of the taxpayers – were of paramount importance in predicting tax compliance.

Hypothesis 5, which considered the influence of subjective norms on the intention to comply, was also accepted in both countries. This is based on the presence of the significant path coefficients at the 0.005 level. The results of this study implied that respondents in both countries shared the same belief that subjective norms have a significant influence on their intention to comply. Respondents believed that a higher motivation to comply with their referent groups could result in better compliance behaviour. The results were consistent with previous studies (e.g., Bobek et al. 2007; Elffers et al. 1987; Hanno & Violet 1996) which also find a positive relationship between these two variables. In addition, a similar opinion was also reported between the New Zealand and Malaysian samples in terms of the effect that perceived behavioural control had on the intention to comply. The taxpayers in both countries viewed that perceived behavioural control was an important factor, thus leading to the acceptance of Hypothesis 6. The negative coefficients (-0.159 and -0.044 in New Zealand and Malaysia, respectively), suggest that compliance behaviour could be higher when taxpayers had a low control over avoiding and evading tax. The results were consistent with TPB's premise that individuals' decision of whether or not to perform a particular behaviour is influenced by perceptions of the level of difficulty in performing that behaviour (Azjen 1991). In short, the results of the study found that perceptions of tax fairness and all TPB variables had a significant influence on the taxpayers' compliance decision. These results not only support previous studies, but also provide an indication that the decision to use TPB in explaining tax compliance behaviour was appropriate for this study.

The path coefficient from knowledge of income tax to the perceptions of tax fairness was considered in Hypothesis 7. The path coefficients of 0.346 (New Zealand) and 0.460 (Malaysia) revealed that respondents in both countries commonly agreed that tax knowledge had a significant influence on their perceptions of tax fairness in a positive manner. Hence, the results provide support to claims that possessing adequate knowledge of the income

tax system would improve individual perceptions of tax fairness (Christensen et al. 2000; Fallan 1999; Maroney et al. 2002; Schisler 1995). With regard to Hypothesis 8, Table 3 shows that respondents in both environments consider tax complexity as having an important influence on their perceptions of tax fairness. In particular, the positive path coefficients (which were significant at the 0.005 level) suggest that a less complex tax system would improve the taxpayers' perceptions of tax fairness. The results were consistent with Carnes and Cuccia (1996), Carroll (1987) and Kirchler et al. (2006), who document an inverse relationship between tax complexity and the perceptions of tax fairness.

CONCLUSION, LIMITATIONS AND FUTURE RESEARCH

This comparative study between New Zealand and Malaysian taxpayers examines the perceptions of tax fairness of individual taxpayers of their respective income tax systems and their compliance behaviour. Furthermore, this study investigates the effect of the perceptions of tax fairness and the TPB variables on tax compliance behaviour. In addition, the influence of tax knowledge and tax complexity on the perceptions of tax fairness is also examined. In order to answer the first objective, the t-test analysis was employed and the findings provided support to the view that the perceptions of tax fairness and compliance behaviour could differ across countries. Notwithstanding that, a universal pattern appears to exist cross culturally in relation to the manner in which taxpayers formulate their judgments about whether or not to comply with their tax obligations. The findings suggest that taxpayers in both New Zealand and Malaysia commonly agreed on the role of perceptions of tax fairness and the TPB elements in determining tax compliance behaviour. The findings also provide an answer to the second objective of this study. Likewise, the role of tax knowledge and tax complexity in the perceptions of tax fairness was also highlighted.

This empirical evidence is expected to contribute to the literature on compliance behaviour, particularly in New Zealand and Malaysia, in three ways. First, this cross-cultural study generates additional evidence to the limited literature available regarding tax compliance in these two countries. Most of the previous studies on this subject have been undertaken in the other parts of the world, such as the US, Europe and Australia. Secondly, this study has developed a new set of measures of perceptions of tax fairness, providing an alternative to the set offered by Gerbing (1988). This new instrument would be useful for future researchers intending to undertake studies of the perceptions of tax fairness in other countries. Future studies could also benefit from the new measures for tax knowledge, tax complexity and compliance behaviour. Finally, the integration of the TPB and the three external variables not only prove that the TPB is useful in explaining

tax compliance behaviour, but also extend this well-established theory. The extended model could be replicated in other countries.

In addition to advancing knowledge in the taxation area, this study also has practical implications. First, the information pertaining to various dimensions of tax fairness will be useful to the tax authorities in order to improve in areas which have led to negative attitudes regarding the tax system among their taxpayers. For example, the information that New Zealand taxpayers have the lowest score on general fairness can assist the IRD by focussing attention on possible ways to improve this aspect of fairness among taxpayers, while maintaining the positive perceptions of tax fairness on the remaining dimensions. Secondly, the finding that attitude has the highest influence on tax compliance could be utilised by tax authorities to develop appropriate strategies to improve compliance. Since changing attitude requires time and persistence, tax authorities may need to emphasize long term and continuous strategies, such as incorporating tax education in the country's high school curriculum; and conducting continuous public campaigns and seminars for their taxpayers to improve their compliance behaviour. Thirdly, the information on the influence of the taxpayers' level of knowledge and the perceived complexity of their respective income tax systems on the perceptions of tax fairness could assist tax authorities to further develop their tax education and tax simplification programmes.

However, this study is not without limitations. First, the survey response rate of 10 percent (New Zealand) is considered low relative to that in previous studies. However, with more than 200 responses, the sample is sufficient to provide the basis for a thorough analysis. Another limitation is that this study has only sampled individual taxpayers. Thus, caution should be taken when generalizing to other categories of taxpayers, such as corporate taxpayers. In relation to this, it would be interesting if future research would include other groups of taxpayers and tax professionals. In addition, future research should continue to extend the compliance model, possibly by further decomposing TPB variables. Furthermore, the TPB model could be extended in future research to include other potential variables, such as penalty regimes.

REFERENCES

Azjen, I. 1985. From intentions to actions. In *Action Control from Cognition to Behaviour*, eds. J. Kuhl & J. Beckmann, 11-39. New York: Springer-Verlag.

Azjen, I. 1991. The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes* 50: 179-211.

Azmi, A., Anna Che. & Perumal, A. Kamala. 2008. Tax fairness dimensions in an Asian context: The Malaysian perspective. *International Review of Business Research Papers* 4(5): 11-19.

Bagozzi, R. P. & Yi, Y. 1988. On the evaluation of structural equation models. *Journal of the Academy of Marketing Science* 16(1): 74-94.

Belkaoui, A. R. 2004. Relationship between tax compliance internationally and selected determinants of tax morale. *Journal of International Accounting, Auditing and Taxation* 13(2): 135-143.

Bobek Donna. 1997. Tax fairness: How do individuals judge fairness and what effect does it have on their behaviour? PhD Diss., University of Florida, Michigan.

Bobek, D. & Hatfield, R. C. 2003. An investigation of the theory of planned behaviour and the role of moral obligation in tax compliance. *Behavioural Research in Accounting* 15: 13-39.

Bobek, D., Robin, W. R. & John, T. S. 2007. The social norms of tax compliance: Evidence from Australia, Singapore and the United States. *Journal of Business Ethics* 74(1): 49-64.

Carnes, G. A. & Cuccia, A. D. 1996. An analysis of the effect of tax complexity and its perceived justification on equity judgments. *Journal of the American Taxation Association* 18: 40-56.

Carroll, J. S. 1987. Compliance with the law: A decision-making approach to taxpaying. *Law and Human Behaviour* 11(4): 319-335.

Chin, W. W. 1998. The partial least squares approach to structural equation modelling. In *Modern Methods for Business Research*, edited by G.A. Marcoulides, 295-336. New Jersey: Lawrence Erlbaum Associates.

Chin, W. W., Marcolin, L. B. & Newsted, P. R. 2003. A partial least squares latent variable modelling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic-mail emotion/adoption study. *Information Systems Research* 14(2): 189-217.

Chin, W. W. & Newsted, P. R. 1999. Structural equation modelling analysis with small samples using partial least squares. In *Statistical Strategies for Small Sample Research*, edited by R. H. Hoyle, 307-339. Thousand Oaks: Sage Publications.

Christensen, A. L., Hite, P. A. & Roberts, M. L. 2000. An experimental study of the effects of marital status and family size on tax fairness judgments. *Advances in Taxation* 12: 51-76.

Coleman, S. 1997. Income tax compliance: A unique experiment in Minnesota. *Government Finance Review* 13: 11-15.

Committee of Tax Experts 1998. A Report to the Treasurer and Minister of Revenue December 1998. Available at http://www.executive.govt.nz.

Cullis, J. G. & Lewis, A. 1997. Why people pay taxes: From a conventional economic model to a model of social convention. *Journal of Economic Psychology* 18: 305-321.

Dillman, D. A. 2007. *Mail and Internet Surveys: The Tailored Design Method* (2nd ed.). New Jersey: John Wiley & Sons Inc.

Dwyer, T. & Williams, L. M. 2002. Nurses' behaviour regarding CPR and the theories of reasoned action and planned behaviour. *Resuscitation* 52: 85-90.

Efebera, H., Hayes, D. C., Hunton, J. E. & O'Neil, C. 2004. Tax compliance intentions of low-income individual taxpayers. *Advances in Accounting Behavioural Research* 7: 1-25.

Elffers, H., Weigel, R. H. & Hessing, D. J. 1987. The consequences of different strategies for measuring tax evasion behavior. *Journal of Economic Psychology* 8: 311-337.

Etzioni, A. 1986. Tax evasion and perceptions of tax fairness: A research note. *The Journal of Applied Behavioural Science* 22(2): 177-185.

Fallan, L. 1999. Gender, exposure to tax knowledge and attitudes towards taxation: An experimental approach. *Journal of Business Ethics* 18(2): 173-184.

Gerbing, M. D. 1988. An empirical study of taxpayer perceptions of fairness. PhD. Diss., University of Texas, Austin.

Gilligan, G. & Richardson, G. 2005. Perceptions of tax fairness and tax compliance in Australia and Hong Kong: A preliminary study. *Journal of Financial Crime* 14(4): 331-343.

Guo, Q., Johnson, A. C., Unger, J. B., Lee, L., Xie, B., Chou, C. P., Palmer, P. H., Sun, P., Gallaher, P. & Pentz, M. A. 2007. Utility of the theory of reasoned action and the theory of planned behaviour for predicting Chinese adolescent smoking. *Addictive Behaviours* 32: 1066-1081.

Hanno, D. M. & Violet, G. R. 1996. An analysis of moral and social influences on taxpayer behaviour. *Behavioural Research in Accounting* 8: 57-75.

Harris Thomas Donald. 1989. The effect of type of tax knowledge on individuals' perceptions of fairness and compliance with the federal income tax system: An empirical study. PhD. Diss., University of South Carolina, South Carolina.

Hasseldine, D. J., Kaplan, S. E. & Fuller, L. R. 1994. Characteristics of New Zealand tax evaders: A note. *Accounting and Finance* 34(2): 79-93.

Inland Revenue Board of Malaysia 2004. Annual Report. 139p. Available at http://www.hasil.org.my.

Inland Revenue Board of Malaysia 2005. Annual Report. 127p. Available at http://www.hasil.org.my.

Inland Revenue Board of Malaysia 2006. Annual Report. 169p. Available at http://www.hasil.org.my.

James, S. & Alley, C. 2002. Tax compliance, self-assessment system and tax administration. *Journal of Finance and Management in Public Services* 2(2): 27-42.

Kirchler, E., Niemirowski, A. & Wearing, A. 2006. Shared subjective views, intent to cooperate and tax compliance: Similarities between Australian taxpayers and tax officers. *Journal of Economic Psychology* 27(4): 502-517.

Lempert, R. 1992. Commentary – reciprocity and fairness: Positive incentives for tax compliance. In *Why People Pay Taxes: Tax Compliance and Enforcement,* edited by J. Slemrod, 251-257. Ann Arbor: University of Michigan Press.

Loo, E. C., McKerchar, M. & Hansford, A. 2008. *Tax Compliance Behaviour: Findings Derived from a Mixed Method Design*. Paper presented at the 8th International Tax Administration Conference, 27-28 March, Sydney, Australia.

Loo, E. C., McKerchar, M. & Hansford, A. 2009. Understanding the compliance behaviour of Malaysian individual taxpayers using a mixed method approach. *Journal of the Australasian Tax Teachers Association* 4(1): 181-202.

Maroney, J. J., Rupert, T. J. & Wartick, M. L. 2002. The perceived fairness of taxing social security benefits: The effect of explanations based on different dimensions of tax equity. *The Journal of the American Taxation Association* 24(2): 79-92.

McKerchar, M. 2003. The impact of income tax complexity upon tax compliance: A study of Australian personal taxpayers. *Australian Tax Research Foundation*, 39.

Mustafa Mohd Hanefah Hajah. 1996. An evaluation of the Malaysian tax administrative system and taxpayers' perceptions towards self-assessment system, tax law fairness and tax law complexity. PhD. Diss., Universiti Utara Malaysia, Malaysia.

New Zealand Inland Revenue 2007. Annual Report November 2007. 123p. Available at http://www.ird.govt.nz.

Organisation for Economic Co-operative Development 2007. Economic survey of New Zealand April 2007. Available at http://www.oecd.org.

Paris, H. & Broucke, S. V. D. 2008. Measuring cognitive determinants of speeding: An application of the theory of planned behaviour. *Transportation Research* Part F(II): 168-180.

Porcano, T. M. 1988. Correlates of tax evasion. *Journal of Economic Psychology* 9(1): 47-67.

Richardson, G. 2005. An exploratory cross-cultural study of tax fairness perceptions and tax compliance behavior in Australia and Hong Kong. *International Tax Journal* 31(1): 11-67.

Richardson, M. & Sawyer, A. 2001. A taxonomy of the tax compliance literature: Further findings, problems and prospects. *Australian Tax Forum* 16(2): 137-320.

Roberts, M. L. 1994. An experimental approach to changing taxpayers' attitudes towards fairness and compliance via television. *The Journal of American Taxation Association* 16(1): 67-86.

Roth, J. A., Scholtz, J. T. & Witte, A. D. 1989. *Taxpayer Compliance: An Agenda for Research*. Philadelphia: University of Pennsylvania Press.

Schisler, D. L. 1995. Equity, aggressiveness, consensus: A comparison of taxpayers and tax preparers. *Accounting Horizons* 9(4): 76-87.

Tan, L. M. & Chin-Fatt, C. 2000. The impact of tax knowledge on the perceptions of tax fairness and attitude towards compliance. *Asian Review of Accounting* 8(1): 44-58.

Tan, L. M. 1998. Taxpayers' perceptions of fairness of the tax system: A preliminary study. *New Zealand Journal of Taxation Law and Policy* 4: 59-71.

Verboon, P. & Dijke, M. 2007. A self-interest analysis of justice and tax compliance: How distributive justice moderates the effect of outcome favourability. *Journal of Economic Psychology* 28: 704-727.

Zhiyong, D. & Qingyang, G. 2007. An experimental study on fairness perceptions: Evidence from Singapore and two cities in China. *The Business Review* 7(1): 82-89.

Natrah Saad
School of Accountancy
College of Business
Universiti Utara Malaysia
Sintok, Kedah, Malaysia
E-mail: natrah@uum.edu.my