Chapter 6  Conclusion

This final chapter begins by presenting a précis of the thesis including its objectives, its research questions and its findings. The main objective of this research was to gain further insights into the influence of the introduction of self assessment and other possible causes that might have impact on the compliance behaviour of individual taxpayers in Malaysia. This thesis began with an overview of the literature, focusing on the introduction of self assessment in Malaysia and the readiness of individual taxpayers to cope with the change. It also drew on the experiences of eight other self assessment tax regimes in implementing self assessment and the lessons therein for the IRB. An overview of a range of models of compliance behaviour (such as the economic and sociological-psychological models) and the factors associated with compliance behaviour were reviewed in Chapter 2. This led to the identification of the six research questions. The rationale for the mixed method research design employed in this research was presented in Chapter 3. The design incorporated a survey, an experiment and a case study with findings being analysed both independently (Chapter 4) and across methods (Chapter 5). The processes for data collection and the techniques for each of the three methods were explained and the findings then presented in the context of the research questions posed (in Chapters 4 and 5 respectively).

Following the précis, the contributions of this research to the body of knowledge on taxpayers’ compliance behaviour are identified and presented. The implications of the findings to tax administrators, policy makers and individual taxpayers in Malaysia and other tax jurisdictions are then discussed. This chapter concludes with a discussion of the strengths and limitations of this research and identifies areas where further research may be considered worthwhile.

6.1 Overview of the research and its findings

This research began with an overview of the Malaysian income tax system and its beginnings in the 1910s, during the era of British colonial rule in Malaysia. In 1967, the three then existing income tax statutes\textsuperscript{358} were replaced with the current Income Tax Act (1967) (Act 53), which, effective from 1968 has been the statute governing the administration of income tax for the whole of Malaysia.

\textsuperscript{358} See above n 13, n 14 and n 15.
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Under the Income Tax Act (1967), the tax liabilities of individual taxpayers would depend on several factors including their marital status and the number of dependents (i.e. spouses and children). Subject to specific conditions, relief and rebates are available to any individual taxpayer pertaining to specific expenditure or payments incurred by that individual in relation to himself/herself or his/her dependents and parents. In addition, the personal income tax system allows married couples the option of joint or separate assessment, whereby the choice of either of the two options would give rise to different tax liabilities.

In Malaysia, prior to the year of assessment 2000, income tax was assessed on the preceding year basis, under the official assessment system. Effective from the year of assessment 2000, the preceding year basis was replaced with the current year basis. The official assessment system was then replaced in stages with self assessment. Salary and wage earners and the self-employed in Malaysia, for the first time, were required to exercise self assessment when filing their returns in early 2005 in respect of income derived in the year 2004. With self assessment replacing the official assessment system, assessment responsibilities that were previously exercised by trained and professional tax officers are now placed on the shoulders of the generally untrained lay taxpayers. Hence, this gives rise to a very pertinent question, ‘are the untrained lay taxpayers capable and ready to shoulder the responsibility of exercising self assessment?’ Although one of the objectives of self assessment is to enhance voluntary compliance, this objective can only possibly be achieved if the pertinent question asked is adequately addressed and the answer is in the positive.

A review of the limited empirical evidence in Malaysia revealed that individuals were generally ‘tax illiterates’. Some individuals were not aware of the implementation of self assessment, while others who were aware still preferred the official assessment system. Further, some individuals with higher educational qualifications were found to be unaware of their tax obligations. Some taxpayers were found to be able to compute their own tax liabilities but still preferred to receive instructions from the tax authority. At the same time, there had been very little investigation into the behavioural aspects of tax compliance in Malaysia.

359 See above n 1.
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Since self assessment is relatively new in Malaysia, a review of the experiences of the successes and shortcomings in some other self assessment regimes could provide valuable lessons for the Malaysian tax administrators and policy makers. In this respect, experiences of eight other self assessment regimes (viz. the United States, Canada, Japan, Pakistan, Bangladesh, New Zealand, Australia and United Kingdom) were reviewed. Generally, self assessment was introduced by these tax regimes to overcome the shortcomings of the traditional assessment system. Some countries (such as the United States, Canada, Japan, New Zealand and Australia) have been more successful than the others in the introduction and implementation of self assessment. Among the reasons for different levels of success are that different systems require different tax administrative structures and different job functions of tax officers. Likewise, under self assessment, taxpayers in different tax regimes assume different responsibilities and have different expectations.

Some apparent shortcomings of a number of self assessment regimes (such as Pakistan and Bangladesh) were their failure to reorganise their respective tax administrative structures and to re-orientate the mindset of tax officers and taxpayers to cater for the change from traditional assessment to self assessment. The authoritarian and adversary approaches and lack of public relations on the part of the tax authorities contributed to the erosion of the community’s confidence in the tax authorities and this was detrimental to the enhancement of voluntary compliance. Ad hoc and piecemeal remedies, rather than comprehensive and well conceived solutions to apparent shortcomings further aggravated such shortcomings.

On the other hand, well planned structures and strategies, effectively and efficiently conceived and implemented to accommodate for the changing needs of self assessment had led to more successful implementations in other self assessment regimes (such as the United States, New Zealand and Australia). In addition, other than enforcement, the rendering of services, counselling and provision of tax education by the tax authorities have contributed greatly to the successful operations of self assessment systems. Other successful contributing factors are strategies directed at the enhancement of the community’s confidence in the tax administration. These included the development of good public relations with taxpayers, more friendly and open approaches by the tax authorities and better liaison, consultation
and communication with taxpayers. Further, cognisance of taxpayers’ compliance behaviour also contributed towards the formulation of policies and strategies that enhanced voluntary compliance.

Factors influencing tax compliance behaviour were and are being investigated using different behavioural models, among which are the economic models and the psychological-sociological models. Discussions on the literature review in Chapter 2 were drawn from across a range of disciplines and from different research paradigms and different models of compliance behaviour. Models ranging from the economic deterrence models by Allingham and Sandmo (1972); the sociological/psychological models, particularly developed by Ajzen and Fishbein (1975, 1977, 1980, 1988) as well as by Lewis (1982b); and the expanded models proposed by Fischer, Wartick and Mark (1992) and Chan, Troutman and O’Bryan (2000) were reviewed.

The economic models posit that human behaviour is influenced by rational considerations and the weighing of the perceived costs and benefits arising out of a specific behaviour or action. Should any individual perceive that a particular behaviour would result in positive net benefits, he/she would rationally behave as such to reap the reward. On the other hand, should there be any perceived negative net benefits, an individual would rationally behave accordingly so as to avoid suffering any loss. The economic models, although useful for investigating tax compliance behaviour, failed to adequately take into consideration the complexity of human behaviour. Human behaviour is influenced not only by rational economic considerations of costs and benefits, but also by a multitude of psychological and sociological factors. The psychological-sociological models also incorporate non-economic factors such as education, knowledge, awareness, income, moral, attitudes, culture/ethnic, politics, peers and institutional influence to study human behaviour.

Based on this review, it can be concluded that taxpayers’ compliance behaviour is complex, diverse and multi faceted, and is influenced by a variety of factors or causes. A range of factors that have been considered as being related to taxpayers’ compliance behaviour included the economic and deterrence factors, social factors, institutional variables, equity variables, ethic and moral, demographic and culture variables. The economic and deterrence factors include tax rate, tax audit, probability of detection, audit rate, prior audit, enforcement, penalties, fines, positive
inducement and rewards. The social factors are those related to attitudes, education and income level. While institutional uncertainty, tax knowledge and complexity of tax law are the institutional variables, equity variables includes fiscal policy and perception towards fairness of the tax system.

Tax compliance behaviour has been an area of research interest for over 30 years. However, the influence of the introduction of self assessment on taxpayers’ compliance behaviour does not appear to have previously attracted much research interest by researchers. This might well be due to the reason that in countries that had implemented self assessment decades ago, research on tax compliance conducted was focused more on the economic or sociological-psychology paradigms. Given the timing of the introduction of self assessment in Malaysia, it was a unique opportunity to research the influence of the change from official assessment system to self assessment on compliance behaviour. In the context of Malaysian taxpayers, it was expected that self assessment would affect individual taxpayers more than other category of taxpayers, such as companies and other incorporated entities. As such, individual taxpayers were identified as the subjects for this research, particularly on how the introduction of self assessment, and taxpayers’ knowledge on taxation had influenced their compliance behaviour.

Self assessment places the responsibility on taxpayers to correctly assess their own tax liabilities. As a result, taxpayers’ tax knowledge was expected to play an important role in ensuring that they exercised appropriate compliance. Under the self assessment regime, taxpayers need to understand their compliance obligations while the tax authorities need to ensure that taxpayers comply with the provisions of the tax law. Traditionally the IRB recognises penalties and probability of detection (through tax audits) as the two important variables to ensure compliance by taxpayers (Singh & Bhupalan 2001). Apparently, from the IRB’s perspective, tax audit seemed to have more effect in enhancing taxpayers’ compliance and penalties would act as deterrents against non-compliance. As such, to the IRB, the low compliance rate and non-compliance had influenced the frequency of its tax audit activities and its practice of imposing penalties.

360 These are particularly western countries such as the United States, Canada, New Zealand and Australia.
361 See above n 164.
362 See 2.1.6 for definition of appropriate compliance.
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However, based on the literature, taxpayers’ compliance behaviour is not influenced only by penalties and frequency of tax audits, but also by their level of tax knowledge, financial constraints and grievances as well as by taxpayers’ attitude towards and perceptions of the tax system, such as in relation to the fairness of the system and the inadequacy of the tax authority’s enforcement strategies. Further, in Malaysia, among the main concerns of taxpayers are the uncertainty of the tax law and interpretations of public rulings, as currently, there are conflicting explanations and interpretations in relation to the public rulings and related judicial decisions. Given that self assessment for individual taxpayers was first introduced in Malaysia in 2004, understanding the impact of self assessment on compliance behaviour should be of great importance to the Malaysian tax administrators.

The objective of this research was to gain further insights into the influence of the introduction of self assessment and other possible causes that might have impact on the compliance behaviour of individual taxpayers in Malaysia. Against this backdrop, six research questions were developed to address the research problem statement, whereby five categories of causes, namely assessment system, tax knowledge, tax structure features, financial constraints and attitude towards tax, together with the main cause (i.e. self assessment) and one outcome (taxpayers’ compliance behaviour) were investigated. The six research questions were:

(1) Has changing from OAS to SA system affected compliance behaviour of Malaysian individual taxpayers?

(2) Do tax structure features (tax rates, tax audit and penalty) affect compliance behaviour?

(3) Does taxpayer’s attitude towards tax affect compliance behaviour?

(4) Does taxpayer’s tax knowledge affect compliance behaviour?

(5) Do financial constraints of taxpayers affect compliance behaviour?

(6) Are there relationships between the five causes (assessment system, tax knowledge, tax structure features, attitude towards tax and financial constraints)?

For the main cause (i.e. assessment system), this research was aimed at exploring taxpayers’ understanding of the new self assessment system and to investigate
taxpayers’ perceptions on the change from the official assessment system to self assessment system. To ensure successful implementation of self assessment, taxpayers need to possess adequate tax knowledge in order to comply, as any lack of tax knowledge would be expected to lead to unintentional non-compliance as well as over compliance. Thus, taxpayers’ tax knowledge was expected to influence their compliance behaviour.

Tax audit and penalty are part and parcel of any self assessment system. Thus these two features were included in the tax structure features\textsuperscript{363} for exploration with the view to investigate whether they might have affected the compliance behaviour of individual taxpayers in Malaysia. Two other categories of causes, i.e. taxpayers’ financial constraints and attitudes towards tax were also expected to affect individual taxpayers’ compliance behaviour. It was theorised that individuals experiencing financial distress were more likely to be engaged in tax evasion than those facing less financial difficulties. A study (Vogel 1974) revealed that respondents who experienced improved economic status were likely to admit that they evaded taxes as compared to those who suffered economic difficulties. Other evidence showed that the lack of funds was negatively correlated with the level of tax compliance (Ritsema, Thomas & Ferrier 2003). Aspects of financial constraints, such as income level and financial commitments towards one’s family, have been found to be closely linked to one’s financial position. Although taxpayers’ income level appeared to have influenced compliance, research findings revealed mixed and inconsistent evidence (Clotfelter 1983; Witte & Woodbury 1985; Jackson & Milliron 1986; Dubin & Wilde 1988; Alm, Jackson & McKee 1992c; Young 1994).

Attitudes, in some way, do influence behaviour. Attitudes towards tax could change even though there is no change in terms of fiscal policies and tax laws. A particular behaviour may represent a multiplicity of attitudes, and attitude towards tax appears to be an important construct with more than one dimensions. Studies revealed that when taxpayers were at higher stages of reasoning, their attitudes would change accordingly (Chan, Troutman & O’Bryan 2000). Taxpayers’ satisfaction with the

government and experience of unfairness as well as negative experiences with the tax authority appeared to play significant roles in forming taxpayers’ perceptions and attitudes towards tax and that would eventually affect their compliance behaviour. Therefore actions taken by the relevant authorities should be intended to increase taxpayers’ positive attitudes and commitment towards the tax system and the payment of taxes.\textsuperscript{364} In addition, taxpayers’ demographic attributes (such as age, gender, level of education, ethnicity etc) were incorporated as variables in this research in order to establish a better understanding of their mediating effects on compliance behaviour.

Given that this research touches on taxpayers’ perceptions on the change of assessment system, understanding of taxpayers’ tax knowledge, taxpayers’ financial constraints and their attitudes towards tax, a single research paradigm would be insufficient to gather adequate evidence to address the objectives of this research. Thus, a mixed method design using both the quantitative and qualitative paradigms was adopted and developed.

A quantitative research paradigm is an approach for developing knowledge by drawing from various literatures and evidence and to deductively form a framework for developing research questions and subsequently formulating relevant hypotheses. Generally, the methods employed in the quantitative research paradigm assumed that, in reality, a cause and effect relationship exists between variables. To test the relationships between the variables, strategies such as surveys, experiments, observations or data from secondary sources are employed. Data collected is then analysed and interpreted statistically by either accepting or not accepting a particular hypothesis. As such, the quantitative research paradigm has been criticised for its failure to incorporate a broader range of information, neglecting the essence of life and not able to capture the real meaning of social behaviour.

In contrast, the qualitative research paradigm is more inclined towards uncovering meanings and understandings of broad interrelationships. It also places more reliance on the population being studied to provide explanation of their behaviour with the objective to understand the meaning of individual experiences that are socially and historically constructed, as well as with the intent of developing a theory.

\textsuperscript{364} For example, see Smith & Stalans 1991; Smith K 1992; Feld & Tyran 2002.
or pattern. Typically, under such research paradigm, methods of inquiry to gather data include the use of narratives, phenomenologies, ethnographies, grounded theory studies or case studies. These methods of inquiry (other than case study) require a prolonged period for data gathering. Hence, a case study is considered a more appropriate\textsuperscript{365} option for this research in that it would allow the researcher to explore in depth one or more subjects or observations. Data gathered through various procedures and case(s) are bounded by time and activity. As a case study (through an inductive approach) aims to discover theory rather than the verification of existing theories, there is no manipulation of variables and no predetermined outcomes.

Studies using the qualitative paradigm do not make general statements about large or total populations and had been criticised for being selective in reporting results because no simple data reduction method is available. Nevertheless, the purpose of this research involved the understanding of individual taxpayers' attitude and behaviour, which could be too complex just to be conjured up with quantitative methods of inquiry. The superiority of combining both paradigms in a mixed method approach is that they could complement each other in searching for comprehensive answers to the research questions.

A mixed method is also known as a triangulation of different data collection strategy involving mixing qualitative and quantitative styles of research and data (Neuman 2003:139; Creswell 2003). Triangulation should neutralise any inherent bias in a single method and a mixed method research design is the most appropriate in answering research questions for most applications of social and behavioural sciences. Mixing styles can be conducted either sequentially (Dressler 1991, quoted in Neuman 2003:139) or simultaneously.\textsuperscript{366} The objective of using different methods is to confirm, cross-validate, or corroborate findings within a single study (Greene, Caracelli & Graham 1989; Morgan 1998; Steckler et al 1992, quoted in Creswell 2003:217). Hence, a mixed method strategy, comprising of both the qualitative and quantitative paradigms, combines the rigor and precision of quantitative designs and qualitative data with the in-depth understanding of qualitative methods. Data and findings from each of the methods can be complementary and used for cross-validation. As such, for this research, two quantitative methods (i.e. survey and

\textsuperscript{365} See above n 223.

\textsuperscript{366} See above n 224.
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experiment) and one qualitative method (i.e. case study) were implemented concurrently in three phases between November 2004 and July 2005.

The first quantitative method used was a survey. Under the survey method, a repeated survey design or ‘repeated cross-sectional design’ was conducted before and after the filing of tax returns at the time when self assessment was first introduced. The objectives of the survey method were threefold. Firstly, evidence was to be obtained on taxpayers’ perceptions regarding the change of assessment system. Secondly, evidence was to be obtained regarding the extent to which taxpayers’ knowledge on personal income tax law had changed as a result of the introduction of self assessment. Thirdly, the survey sought information that would enable the investigation of the effects of three other likely causes or factors (i.e. tax structure features, taxpayers’ financial constraints and attitude towards tax), that may have influenced taxpayers’ compliance behaviour. These three causes were derived and adopted from the literature with some modifications to suit the Malaysian context. In addition, the survey was used to collect data pertaining to the demographic variables of respondents.

A similar survey instrument was used but targeted at different samples selected at random in the pre self assessment survey conducted between November 2004 to January 2005 (i.e. before the filing of tax returns under self assessment) and the post self assessment survey conducted from April 2005 to July 2005 (i.e. after the filing of tax returns under self assessment). Mail questionnaires (prepared in both the English and Malay languages) were distributed along with a covering letter describing the nature of the survey, stressing that complete anonymity was guaranteed and also emphasising that the survey was not conducted by or on behalf of the IRB.

Descriptive statistics such as frequency, mean and standard deviation were utilised to analyse the profile of respondents that include demographic and specific socio-economic backgrounds. To examine the association between variables, cross tabulation was used. In addition, chi square ($\chi^2$) (goodness of fit) tests and $p$-value measure of statistical significance were used to test whether there were significant differences between the pre and post self assessment surveys on some relevant demographic variables, tax knowledge as well as other variables under study. To
investigate whether the five categories of causes were determinants of individual taxpayers’ compliance behaviour, ordinal stepwise logistic regression was used. Prior to the regression analysis, multivariate factor analysis was carried out to identify the relevant components (variables) in the five categories of causes and to examine the correlations and eliminating variables that showed multicollinearity between variables as a way of summarising or reducing data.

Ordinal stepwise logistic regression was considered appropriate for both surveys because the dependent variables consist of polytomous\textsuperscript{367} categories with ordinal data, and the independent variables consist of a combination of continuous and discrete data (see Table 3.2). It also determined the effects of all the five main categories of causes/factors and the moderating variables on the three separate dependent variables, i.e. reporting compliance of taxable income, of exempted income and of casual income. A correlation analysis was also conducted to examine the relationships between the five categories of causes and between the causes and the demographic variables.

The second quantitative method comprised of an experiment. A quasi-experimental research approach known as ‘one group pre-test post-test’ design was used for the experiment. This approach utilised a non-randomised method that could provide a prototype for multi-method investigations in which other feasible methods alone might not be able to provide compelling evidence, specifically in the testing of causal relationships. Generally, a quasi-experimental approach is divided into three categories, pre-test post-test design, time series design and single subject design. Time series design and single subject design were not appropriate for this research as both require numerous measurement periods prior to and after the introduction of interventions. No control group was used in the experiment as it was considered not possible to get a control group to participate in this research. Therefore, the only comparison available would be the pre-test and the post-test within the same group.

Two different simulations were conducted between April 2005 and May 2005 on two different groups of students representing two different categories of taxpayers, namely the salary and wage earners and the self-employed. The experiment had a number of objectives. Firstly, more conclusive evidence were required on whether

\textsuperscript{367} See above n 237.
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enhancement in tax knowledge via education could improve the reporting compliance among participants. Secondly, three tax structure features namely, tax rate, audit rate and penalty rate were manipulated across participants, aiming to see whether the interactions of tax knowledge and tax structure features had affected individual taxpayers’ reporting compliance.

A total of 125 undergraduates participated in two different experiments. The pre-test experiment involved solving of a simulation package, filling in a year 2003 tax return and computing tax liabilities. Subsequent to the pre-test experiment, lessons on personal income tax knowledge (covering computation of aggregate income, computation of total income, the understanding of various relief and rebates available to personal taxpayers as well as the computation of tax liabilities) were given as treatment, followed by a post-test experiment with a similar simulation package but a year 2004 self assessment tax returns were used. T-tests were utilised to investigate the significance differences between these two categories of participants and ANOVA were used to investigate the main and interactive effects of these two causes (i.e. tax knowledge and tax structure features).

Tax compliance research in general has been based on self-reported, simulated or hypothetical behaviour, all of which have been questioned in terms of their indicativeness of actual behaviour. A case study (within the qualitative paradigm) attempts to address these shortcomings. The case study adopted for this research provided indications of the influence of self assessment based on actual behaviour as close as possible to the time of occurrence, judged objectively based on a wider range of information obtained (i.e. the examination of the actual tax returns, taxpayers’ records and documents as well as the opportunities to systematically interview the taxpayers). Traditionally, case studies have been criticised as lacking rigor and allowing biases to influence the directions of the findings and conclusions but this can be minimised by using a case study protocol coupled with the expertise of the researcher (Yin 2003).

A single unit case study bounded by time and activity was conducted before the deadline for filing of actual tax returns in April 2005 for the salary and wage earners and in June 2005 for the self-employed. The case study enabled the researcher to observe the subjects’ actual compliance behaviour by examining their respective
self-completed tax returns, the multitudes of relevant documents and other chains of evidence (so as to strengthen the construct validity). Documentation (a protocol) for the case study was prepared which contained a set of substantive questions reflecting the actual inquiry enabling data collection to follow a general plan with higher degree of consistency and allowing for inferences to be as unbiased as possible. Multiple replications of the case study protocol (to strengthen external validity) were conducted on subjects recruited locally in Malaysia via convenience sampling, i.e. through invitations to the faculty staff of MARA University of Technology, Malacca Campus and the Main Campus in Shah Alam, as well as to the local community.

Observations included the examination of each subject’s tax return prior to the actual lodgement and inspections of any available relevant supporting documents were conducted independently without any interaction among the subjects. This examination was followed by an in-depth interview in order to arrive at a judgement on the pattern of each subject’s compliance. A total of 74 subjects voluntarily participated in this study. This high response rate could probably be due to self assessment being implemented for the first time and also that individual taxpayers would like to be certain that their tax returns were properly completed and that their tax liabilities were accurately computed. Data gathered was analysed through pattern matching on the possible construct that emerged from the case study.

The detail results of each research method namely survey, experiment and case study, were respectively presented in Chapter 4. In Chapter 5, through a cross-method analysis, prominent and significant findings in relation to the effects of the five categories of causes on taxpayers’ compliance behaviour were triangulated to address the six research questions. It is pertinent to note that generally, no conflicting outcomes were found from the results obtained via the two or three mixed method design utilised. From the results of the cross-method analysis, six key findings emerged.

Firstly, the introduction of self assessment had influenced individual taxpayers’ behaviour, particularly in terms of improvement in the understanding of the current assessment system and in their tax knowledge. These improvements are indications

368 Three of the six research questions utilised all the three research methods, (namely survey, experiment and case study) while the other remaining three research questions only used two research methods, (namely survey and case study). (See Table 3.3 for detail descriptions).
that the change of assessment system had positively influenced the compliance
behaviour of individual taxpayers. This is so as self assessment requires taxpayers to
possess adequate tax knowledge in order to discharge their tax obligations. For
instance, the subjects in the case study disclosed that they were more careful in
filling in their tax returns to ensure accuracy and to avoid being penalised
unnecessarily for unintentional errors or unintentional non-compliance. This
research revealed a new finding of the impact of the introduction of self assessment
in the tax compliance research, as there does not exist any comparable empirical
evidence.

Secondly, it is pertinent to note that evidence adduced from this research (via all the
three mixed method design) showed that out of the five categories of causes, tax
knowledge had emerged to have the most effect in determining individual taxpayers’
compliance behaviour. As such, the major impact of the introduction of self
assessment was closely linked to the level of tax knowledge that a taxpayer acquired.
As a result of self assessment, in order to discharge their tax obligations, taxpayers
needed to have reasonably adequate tax knowledge at least to be able to complete
their tax returns and to be able to compute with reasonable accuracy their tax
liabilities. The tax knowledge that taxpayers acquired would also enable them to
understand the chargeability of certain types of income as well as the deductibility of
some expenses incurred. This appeared to be critical as taxpayers’ tax knowledge
could affect their attitude especially in terms of their confidence in handling their tax
affairs and could eventually affect their compliance behaviour. Further, any lack of
tax knowledge and understanding pertaining to the chargeability of any income and
deductibility of any expense would eventually cause one to be unintentional non-
compliant or over compliant. For instance, the findings of the experiment and the
case study showed that lack of tax knowledge did cause numerous errors in the tax
returns furnished respectively by participants and subjects who prepared their own
tax returns. These errors resulted in unintentional non-compliance. Similarly,
ignorance of certain exemptions and deductions available had resulted in over
compliance that obviously favoured the tax authority. Other than for a few
exceptions, generally the subjects in the case study exhibited commitments to
comply with the income tax law if furnished with adequate tax knowledge.
Likewise, the outcomes of this research (specifically, the experiment) also suggested
that taxpayers would have better reporting compliance when they had better tax knowledge. However, it must be acknowledged that for some taxpayers, having more tax knowledge could enable them to exercise better tax planning in terms of tax avoidance and some might even venture into the domain of tax evasion.

Regardless of the type of compliance behaviour, the effect of tax knowledge on individual taxpayers’ compliance behaviour remained robust and prevalent. As such, the findings of this research had contributed new evidence to the existing literature in revealing the existence of positive relationships between tax knowledge and tax compliance.

Thirdly, this research also revealed information concerning taxpayers’ reactions to the current enforcement strategies particularly on tax audit and penalty. To a certain extent, these two enforcement strategies could be effective deterrence tools that could be used by the IRB. For instance, evidence gathered from the subjects of the case study revealed that fear of being tax audited and of being penalised had indirectly influenced the subjects’ decisions to comply with the tax law. Even though there were expressions of dissatisfaction among the subjects within both the higher and the lower tax brackets, the fear of the possibility of being tax audited and of the imposition of penalty had lead some subjects to be over cautious and causing them to over comply. However, it needs to be cautiously noted that not all taxpayers were alike in terms of how tax audit or penalty affected their compliance behaviour, particularly those who were salary and wage earners. For the salary and wage earners (of whom withholding tax was imposed on their employment income), tax audit was a less effective tool, as the majority of subjects (i.e. from the salary and wage earners) confessed that they were keen to file their returns in order to get the refund of their over withheld taxes. Nevertheless, the findings of this research have added to the body of evidence that economic models do have significance in contributing to the understanding tax compliance behaviour in real world settings.

Fourthly, overall, it appeared that financial constraints had the least effect on individual taxpayers’ compliance behaviour. Financial constraints are not currently a main concern among the respondents and subjects (who are salary and wage earners)

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369 For example, see Fischer, Wartick & Mark 1992; Christensen, Weihrich & Newman 1994; Kasipillai et al 1999; Chan, Troutman & O’Bryan 2000; Saad, Mansor & Ibrahim 2003.
under the new self assessment system in Malaysia. With the relatively low tax rates imposed on individual taxpayers as compared to some other countries (such as those in Australia and New Zealand), coupled with relief and rebates available, individual taxpayers could be paying very minimal tax (or even having zero tax liability) as revealed by one piece of robust evidence\textsuperscript{370} gathered from the case study. For both categories of individual taxpayers, financial constraints have more direct and strong influence on the compliance behaviour of Malaysian individual taxpayers who were self-employed. This finding provided clearer evidence that financial constraints did have an effect on different categories of taxpayers. This is consistent with as well as contradicting the findings of other previous studies,\textsuperscript{371} at least in terms of the effect of financial constraints on different categories of taxpayers rather than on all taxpayers as a whole.

Fifthly, in terms of attitudes towards tax, two findings prominently emerged from the survey and the case study. On one hand, taxpayers' attitude in terms of confidence in handling their tax affairs did have a positive impact on their behaviour; on the other hand, taxpayers' attitudes towards the tax system, the tax administration and the IRB's officers' roles had a negative impact on their decision to comply. In this context, the findings of this research are consistent with other studies\textsuperscript{372} which found that taxpayers with more favourable attitudes towards the tax system would be more compliant. In contrast to the effect of financial constraints, these findings on attitude towards tax appeared to be affecting only one category of taxpayer (i.e. the salary and wage earners) but not individual taxpayers as a whole.

Lastly, in the multi-ethnic society of Malaysia, this research revealed evidence on the different needs of different ethnic groups in relation to tax education, how they deal with their tax affairs, how the tax structure features as well as how their attitudes towards tax had affected their decision to comply. This research also revealed evidence on the different compliance behaviour of the two categories of taxpayers (i.e. the salary and wage earners and the self-employed) in respect of the reporting

\textsuperscript{370} This subject had a chargeable income of about RM50,000, but ended up with a zero tax liability
\textsuperscript{372} For example, see Chan, Troutman & O'Bryan 2000; Trivedi, Shehata & Mestelman 2005.
compliance on three different types of income (i.e. taxable income, exempted income and casual income).

At this juncture, the five categories of causes theorised in Chapter 1 appeared to be the causes in determining the compliance behaviour of individual taxpayers in relation to the influence of the introduction of self assessment in Malaysia. Other causes (such as taxpayers’ political preferences and accounting knowledge specifically related to those self-employed in preparation of their accounting statements) did emerge from the case study as determining causes of compliance behaviour. However, they were considered to be relatively too insignificant.

This research had addressed the objectives of the study outlined in Chapter 1. The first objective was to identify the causes that might have influenced compliance behaviour associated with the introduction of self assessment in Malaysia, of which five categories of causes (namely assessment system, tax knowledge, tax structure features, financial constraints and attitude towards tax) were identified. For both categories of individual taxpayers, tax knowledge had the most impact on compliance behaviour of individual taxpayers. Tax structure features (particularly penalty) and attitude towards tax also affected individual taxpayers’ compliance behaviour. The perceptions towards the change of assessment system from official assessment to self assessment and financial constraints had the comparatively least effect on taxpayers’ compliance. The last objective dealing with identifying the significant differences in terms of causes that were affecting the two categories of individual taxpayers has also been addressed, whereby the findings of this research revealed that there were differences in terms of causes (particularly financial constraints and attitude towards tax) that showed different effects on these two categories of taxpayers. Tax structure features also showed marginally different effects on these two categories of taxpayers. In terms of the effect of tax knowledge and of the perceptions towards the change of assessment system, generally, no differences were found between these two categories of individual taxpayers.

6.2 Contribution of this research to the body of knowledge

This research had contributed to the tax compliance literature in at least two important dimensions. Firstly, this research investigated the impact of the
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introduction of self assessment on individual taxpayers where no similar study is known to have been conducted either in Malaysia or in other tax regimes. Hence, this research has contributed new empirical evidence on tax compliance behaviour in a domain where similar evidence is rare or even non-existent. The findings of this research would also stand as special reference for any tax regime or tax authority that may be contemplating on a change from the traditional to the self assessment system, particularly in understanding taxpayers' needs and compliance behaviour in discharging their tax obligations under self assessment. In addition, the comparative analysis of self assessment in eight other tax regimes has provided deeper insights on the factors that had contributed to the success or failure of self assessment, insights that could also serve as lessons that are beneficial not only to the Malaysian tax administrators and policy makers, but also to that of other self assessment tax regimes.

Secondly, the use of the multi paradigms and mixed method design comprising of three research methods, namely, a survey, simulation experiment and case study is unique in that there is no known previous study, (either in Malaysia or elsewhere) that adopts these three methods in a single study to investigate individual taxpayers' compliance behaviour. The relevance of this mixed method design had been demonstrated by showing how one method could confirm and cross-validate or corroborate the findings within a single study. As such, the use of the mixed method design had also enhanced the level of confidence in the overall findings of this research and had made important contributions to the existing knowledge in tax compliance behaviour.

In terms of findings, this research had expanded the realm of knowledge in relation to the causes/factors and mediating effects of taxpayers' compliance behaviour, particularly in the Malaysian context. As the result of the introduction of self assessment, and evidenced by a majority of the subjects in the case study, tax knowledge (or the lack of it) was the major cause of intentional over compliance and unintentional non-compliance, which lead to a number of subjects over paying their
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taxes. As such, previous studies\textsuperscript{373} that found no direct relationship between tax knowledge and tax compliance are hereby refuted.

In terms of the model developed and adopted in this research, it comprised of features pertaining to tax compliance that are similar to those in the expanded models developed by Fischer, Wartick and Mark (1992) as well as Chan, Troutman and O’Bryan (2000). These two models stressed that many factors such as economic, social-psychology and demographic are likely to have interactive effects on how a taxpayer makes decision whether to comply or not. The general model for tax compliance behaviour developed and tested in this research is not only a well blended combination of the two models mentioned, but had also incorporated additional variables [i.e. tax knowledge, assessment system and ethnicity (but of the same nationality\textsuperscript{374})], which provides, arguably, a more diversified and comprehensive model in understanding tax compliance behaviour.

The findings of this research had provided clear indications that the IRB should take cognisance of not only the adequacy of tax knowledge required by taxpayers for accurate computation of tax liabilities, but also of the economic, social-psychology and demographic factors that have bearings on compliance behaviour. These are not only relevant in terms of policy implications in the Malaysian context; but also probably in the context of other tax regimes.

6.3 Policy implications to tax administrators and others

Although this research was limited to the investigation of only five factors/causes, several policy implications have emerged and should be of particular relevance to the IRB. The findings demonstrate the usefulness and importance for the IRB to be aware of and understand taxpayers’ compliance behaviour and the need to render tax education services to taxpayers in order to enable taxpayers to exercise appropriate compliance. Although the IRB does have some minimal general tax education programmes, focused on selected groups of taxpayers, it needs to further develop its programmes to enhance taxpayers’ level of tax knowledge. These education programmes need to be extended to all categories of taxpayers residing in all geographical locations of Malaysia, instead of the current practice of concentrating in

\textsuperscript{373} See Eriksen & Fallon 1996; Mottiakavandar \textit{et al} 2003.

\textsuperscript{374} Chan, Troutman & O’Bryan’s model used two different nationalities, i.e. Hong Kong and US.
the vicinity of the urban areas. In addition, clear and consistent applications of the tax law and public rulings are needed so as not to confuse taxpayers.

This research has also revealed that individual taxpayers in Malaysia, in general, were willing to comply\footnote{This is supported by the report of a study conducted by Riahi-Belkaoui (2004:138) that Malaysia was ranked world no. 8 after Singapore, New Zealand, Australia, UK, Hong Kong, Switzerland and US in term of tax compliance with a rating of 4.34. In this study, tax compliance is measured by an assessment based on a scale from 0 to 6 where high scores indicate high compliance.} and that not only tax audits, but taxpayers' attitudes towards the tax administration and experience taxpayers encountered with the tax officers were the determinants of their compliance behaviour. However tax audits only affected self-employed taxpayers' compliance behaviour and not that of the salary and wage earners. Based on this evidence, the IRB should review its public relation strategies. Perhaps, for the salary and wage earners, the IRB should de-emphasise its tax audit activities, while it should draw up strategies to enhance its public relations with all categories of taxpayers. This could be done through developing a more comprehensive taxpayers' charter which the IRB should commit itself to comply with, and implementing effective tax education and tax compliance programmes that could accommodate the different and diverse needs of the taxpayers.

Apart from tax education, the implementation of self assessment could be more effectively and efficiently administered and voluntary compliance could be further enhanced if the IRB were to take steps to further enhance taxpayers' positive attitudes towards tax and their confidence in managing self assessment. Publicity on the operations of the new self assessment system and on the enforcement strategies and the possible outcomes associated with these strategies would also be expected to improve taxpayers' perceptions towards the tax administration. Tax education programmes should not only emphasise the technical and computational aspects of filing returns and taxpayers' statutory obligations, but should also emphasise the virtue of good tax compliance ethics and moral and taxpayers' social obligations. The tax authority's enforcement strategies should be more positive in outlook, emphasising on the positive implications in the event of taxpayers paying what is due, and how the tax authority would reach out to assist these taxpayers to discharge their tax compliance obligations.
Enforcement strategies of tax audits and penalties should be reviewed by de-emphasising the punitive implications for non-compliance. Penalties should only targeted at the compulsive errant intentional non-compliant taxpayers.

Promoting tax education need not be the sole responsibility of the IRB. Other government agencies, such as the Ministry of Education should consider introducing tax education in curriculum of schools and tertiary institutions, as students are potential taxpayers when they join the workforce in the future. In addition, courses in taxation in tertiary institutions should not be offered only to students in the field of social sciences,\textsuperscript{376} but should also be extended to other fields of study. By doing so, it does not only equip students with adequate tax knowledge, but also contributes to their awareness about their legal, moral or social obligations in relation to tax compliance.

These policy implications are not restricted to the Malaysian setting, as the findings of this research could also serve as important references for any tax jurisdiction contemplating the introduction of self assessment, particularly in countries having low literacy level among taxpaying population. These policy implications are also relevant to those countries that had introduced self assessment but are still working out strategies for more successful implementation.

6.4 Strengths, limitations and future direction for research

As with all other research, this research is not without its strengths and limitations. One of the main strengths of this research is its uniqueness in terms of the timeframe. This research was conducted during the transition from the pre to post self assessment period,\textsuperscript{377} providing a very rare opportunity for the timing of such research. Hence, the findings represent rare, unique and important contributions of empirical evidence to the tax compliance literature as well as to the understanding of tax compliance behaviour, not only in Malaysia, but also in other self assessment tax jurisdictions.

\textsuperscript{376} Currently, courses in taxation are offered to those students within the field of social science such as accountancy or business programmes.

\textsuperscript{377} This was the pre to post self assessment transition period for individuals who are salary and wage earners and those who are self-employed.
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The second strength is the research design. The used of multi paradigms and mixed method design comprising three research methods (namely a survey, simulation experiment and case study) in a single study on individual taxpayers’ compliance behaviour is not known to have been adopted in any similar previous study. The two quantitative components were able to test and validate the relationships between the causes and variables and the results could be generalised with a series of descriptive information and some indications of their statistical significance. In terms of the qualitative component, the multiple replication of subjects provided the most significant strength in understanding the reasons behind taxpayers’ unintentional non-compliance and intentional over compliance. The combination of both quantitative and qualitative methods not only allowed the researcher to cross-validate the results, but also enhanced the confidence level of the research findings. The mixed method design adopted for this research should trigger off and serve as a reference and starting point for future research.

While most research had investigated tax compliance in general, this research went a step further by investigating the different reporting compliance behaviour in respect of three different types of income, namely taxable income, exempted income and casual income.

The model developed in this research and the findings could be catalysts for future research, and the beginning of a series of engrossing explorations, investigations and discoveries to gain further insights into the complex and perhaps infinite patterns of compliance behaviour among groups of taxpayers, particularly taxpayers with different backgrounds or perhaps in different States in Malaysia using stratified sampling.

It is acknowledged that one of the limitations of this research is its focus on five categories of causes, as there could be other existing causes\textsuperscript{378} that were not identified by the current research. Other limitations of this research are those mainly and inherently found in the use of quantitative methodology, namely survey and experiment design. Firstly, survey methodology with its self-report methods of

\textsuperscript{378} Two such causes emerged from the case study, (viz. taxpayers’ political preferences and taxpayers’ accounting knowledge, particularly in relation to the preparation of financial statements by those who are self-employed). Besides these two causes, further investigations are needed to identify other existing causes.
determining attitudes and behaviour is less reliable, especially when information sought on tax is sensitive, potentially incriminating or embarrassing (Hessing, Elffers & Weigel 1988). For instance, survey respondents may have exaggerated their perceptions on the IRB’s administration. Further, there may be non-response bias\(^{379}\) although efforts to minimise it had been addressed.

Secondly, there are criticisms\(^{380}\) that experimental designs are hypothetical and some of the experimental designs which involved artificial game situations might not be representative of actual situations and as a result, cannot be generalised. Participants in a self-contained ‘game’ might be framed to follow behavioural rules that are different from an actual situations. In addition, instructions\(^{381}\) (such as those in Friedland, Maital & Rutenberg 1978) given in the experiment did not allow for taxpayers’ moral considerations (Torgler 2002). Alm (1991) argued that it is not possible to generalise the findings beyond a laboratory experiment, while Martindale, Koch and Karlinisky (1992) pointed out that the findings are limited to the variables used in the experiments. However, Fischer, Wartick and Mark (1992) argued that if the experiments reflected the real world settings, then generalisability could be enhanced.

Thirdly, the ‘one group pre-test and post-test’ design chosen in the experiments did not involve a control group. As such, the outcome of the treatment (in particular tax knowledge) was not able to be compared with that of a control group as in a true experiment design. Arguably, having two different groups of participants (each respectively representing the salary and wage earners and the self-employed) had enhanced the overall findings by comparing the outcomes of these two separate experiments.

Fourthly, it could be argued that having students (who did not have any experience in filing tax returns) as participants in simulation experiments might not be satisfactory samples for studies of tax compliance behaviour (Torgler 2002). However, evidence has shown that there was no difference between the behaviour of students and other participants in similar experimental studies (Baldry 1987; Hasseldine 1993; Eriskin

\(^{379}\) See above n 234.

\(^{380}\) For example, see Alm 1991; Martindale, Koch & Karlinisky 1992; Torgler 2002.

\(^{381}\) Instruction such as ‘...your objective is to maximise your net income (gross income less tax and fines)...’ (Friedland, Maital & Rutenberg 1978:110).
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& Fallan 1996; Andreoni, Erard & Feinstein 1998). Perhaps more studies using similar experiments could be conducted, preferably on actual taxpaying participants other than students in order to establish findings that could be more conclusive and representative of the taxpaying population.

This research was conducted using a cross-sectional study. Perhaps future research could be conducted via a longitudinal study. Through a longitudinal study, researchers could investigate the causes/factors that contribute to the changes in individual taxpayers’ compliance behaviour over time, with the intention to identify potential causes that are likely to influence taxpayers’ compliance behaviour. For instance, studies could explore the pattern of changes in terms of taxpayers’ financial commitments and how compliance cost could affect their compliance behaviour. Future research could also explore whether and how the change in level of tax knowledge affects the compliance decision of taxpayers.

There has been a call for cross-cultural studies between tax jurisdictions in western and non-western countries (Andreoni, Erard & Feinstein 1998). It would be interesting to conduct a comparative empirical study between countries, either having similar or different cultural backgrounds, particularly in the non-western tax jurisdictions, in order to identify common causes that are likely to be affecting individual taxpayers’ compliance behaviour.

As human behaviour is complex and diverse, understanding tax compliance behaviour would be a challenging task both to the tax authority and future researchers. In addition, for a successful implementation of the new self assessment in Malaysia, cooperation and collaboration between the IRB and tax researchers is of paramount importance to search for avenue to further understand the causes underlying the compliance behaviour of taxpayers as well as to improve voluntary compliance.