

CENTRE FOR TAX SYSTEM INTEGRITY



Regulating more effectively: The relationship between procedural justice, legitimacy and tax non-compliance

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**REGULATING MORE EFFECTIVELY:
THE RELATIONSHIP BETWEEN PROCEDURAL
JUSTICE, LEGITIMACY AND
TAX NON-COMPLIANCE**

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The Centre for Tax System Integrity (CTSI) is a specialised research unit set up as a partnership between the Australian National University (ANU) and the Australian Taxation Office (Tax Office) to extend our understanding of how and why cooperation and contestation occur within the tax system.

This series of working papers is designed to bring the research of the Centre for Tax System Integrity to as wide an audience as possible and to promote discussion among researchers, academics and practitioners both nationally and internationally on taxation compliance.

The working papers are selected with three criteria in mind: (1) to share knowledge, experience and preliminary findings from research projects; (2) to provide an outlet for policy focused research and discussion papers; and (3) to give ready access to previews of papers destined for publication in academic journals, edited collections, or research monographs.

Abstract

In recent years many OECD countries have been observing an increase in middle-income taxpayers making use of aggressive tax planning strategies to reduce their tax. In many cases it is unclear whether these strategies are designed and used by taxpayers to legally minimise tax or to illegally avoid tax. What is clear, however, is that those that are designed to exploit loopholes in tax law pose a serious problem to the integrity of a tax system and therefore need to be dealt with in a way that restores both faith and equity back into the system. One issue that needs to be considered when doing this, however, is how tax authorities can best regulate taxpayers who may have inadvertently become involved in such illegal tax planning practices. Using cross-sectional survey data collected from 2292 Australian taxpayers in 2002 (Study 1) and longitudinal survey data collected from 659 Australian taxpayers in 2004 (Study 2), it will be demonstrated that regulatory enforcement strategies that first attempt to coerce and threaten taxpayers back into compliance can sometimes result in taxpayers questioning the legitimacy of the Tax Office's authority, which can subsequently lead to active resistance towards that authority. It will also be shown that the imposition of harsh and excessive civil penalties for tax non-compliance can in fact lead to subsequent non-compliance in the future. It will be argued that a responsive regulatory approach that relies on principles of procedural justice may be the only effective enforcement strategy available to tax authorities who wish to prevent both widespread resistance and future non-compliance to their rules and decisions.

Regulating more effectively: The relationship between procedural justice, legitimacy and tax non-compliance

Kristina Murphy

Introduction

Each year many taxpayers consider how they can best arrange their tax affairs. This may simply involve making use of strategies that allow one to legally minimise tax. For example, in Australia this may include increasing superannuation contributions, or negative gearing an investment property. Alternatively, there are strategies that may involve non-compliant or fraudulent activity that are most appropriately described as tax evasion. For example, these strategies may include creating false expenses or concealing offshore income. There is also a third type of strategy used by some taxpayers that falls somewhere between these two extremes. These are the tax avoidance strategies that tax authorities around the world commonly refer to as aggressive tax planning strategies (also known as abusive tax shelters). They are ‘aggressive’ because they seek to exploit deficiencies or uncertainty in the law (Australian Tax Office, 1999). Aggressive tax planning by its very nature involves finding ways to accomplish compliance with the letter of the law while totally undermining the policy intent or spirit behind the legislation.

Aggressive tax planning used to be primarily reserved for the very wealthy. In recent years, however, many middle-income taxpayers have been cashing in on this new form of financial planning (Australian Tax Office, 2000). For example, the Internal Revenue Service (IRS) recently reported that there had been a proliferation of abusive tax schemes in the United States during the mid 1990s (Internal Revenue Service, 2004). In Australia during the 1990s, scheme related tax deductions were found to increase from \$54 million in 1994 to over \$1 billion in 1998 (mostly due to 42 000 middle-income Australians becoming involved) (Murphy, 2002).

Both the Australian Taxation Office (Tax Office) and the IRS take aggressive tax planning very seriously. Since 1998, for example, the Tax Office has actively moved to penalise taxpayers involved in abusive tax shelters. They have also moved to change legislation to enable them to pursue the promoters of illegal tax schemes. The IRS’s Criminal

Investigation Unit has also developed a nationally coordinated program to combat abusive tax schemes. Their primary focus is on the identification and investigation of those who play a substantial or integral role in facilitating, aiding, assisting, or furthering abusive tax schemes. Secondly, but of equal importance to the IRS, is the investigation of investors who knowingly participate in abusive tax schemes (Internal Revenue Service, 2004). Tax authorities from around the world have also recently joined forces to try to combat aggressive tax planning on an international scale. In 2004 tax Commissioners from Australia, Canada, the United Kingdom and the United States signed a Memorandum of Understanding to establish a joint task force to better coordinate information about aggressive tax planning. Hence, tax authorities worldwide are adopting a tough stance towards those who become involved in such practices.

However, one issue that needs to be seriously considered by tax authorities when tackling aggressive tax planning is how they should best regulate and punish taxpayers involved in such activities. Given aggressive tax planning is now being more widely marketed to middle-income taxpayers, it is perhaps not surprising to see an increase in the number of naïve and unsophisticated taxpayers becoming involved. Take for example Australia's recent experience. During the 1990s thousands of Australians entered into tax schemes that the Tax Office deemed to be aggressive in nature. In 1998, the Tax Office decided to take action against the taxpayers involved in these schemes. The taxpayers involved argued that the schemes were sold to them by accountants and financial planners as a way of legitimately minimising tax while still enabling them to make a long-term investment (Murphy, 2003). As a result, the majority of taxpayers resisted the Tax Office's attempts to recover their tax debts and the conflict between the Tax Office and taxpayers culminated to the point where a Senate inquiry was held (Senate Economics References Committee, 2001, 2002).

In an area such as taxation, the behaviour being regulated is continuous and fundamental to the long-term health of the community. In such a regulatory context, therefore, the goal should be to secure long-term voluntary compliance. How then should a tax authority deal with taxpayers who may have unknowingly participated in aggressive tax planning schemes? Is a punitive deterrence-based strategy appropriate in such a case? The question

therefore, is not about whether or not a tax authority should punish these taxpayers, but how a tax authority should punish these taxpayers in order to secure their long-term voluntary compliance. The reason why this question is of interest to the present paper is because research into compliance has shown that sanctions that are perceived to be unfair or unreasonable can often lead to active resistance towards authority (Ayers & Braithwaite, 1992; Kagan & Scholz, 1984; Fehr & Rockenbach, 2003). The following section briefly discusses some of the research in this area.

Theories of compliance

Two quite different theories that attempt to explain compliance behaviour are the deterrence model and the accommodative model (Kagan & Scholz, 1984). The deterrence model has tended to dominate the formulation of public policy in areas as diverse as criminal justice, welfare policy, and taxation. The theory argues that people are motivated entirely by profit-seeking. They assess opportunities and risks and disobey the law when the anticipated fine and probability of being caught are small in relation to the profits to be made through non-compliance (Kagan & Scholz, 1984). Advocates of the deterrence view believe that regulatees will only comply with an authority's rules and decisions when confronted with harsh sanctions and penalties.

While some research supports the view that deterrence measures can positively affect compliance behaviour (Allingham & Sandmo, 1972; Williams, 2001; Witte & Woodbury, 1985), other research suggests that deterrence-based strategies can sometimes be counterproductive (Ayers & Braithwaite, 1992; Blumenthal, Christian & Slemrod, 1998). In fact, research into reactance has shown that the use of threat and legal authority, particularly when perceived as illegitimate, can produce the opposite behaviour from that sought; these actions are more likely to result in non-compliance, criminal behaviour or overt opposition (Fehr & Rockenbach, 2003; Kagan & Scholz, 1984).¹ Kagan and Scholz (1984) further argue that unreasonable behaviour by regulators generates resistance to compliance. They suggest that unreasonableness may involve disrespect for citizens, or arbitrary refusal to take their concerns into account in the enforcement process. They

¹ For the effects of coercion on subsequent criminal behaviour, see Unnever, Colvin and Cullen, 2004.

suggest that citizen response to such unreasonableness is likely to be weakened respect for compliance with the law.

In response to findings such as these, a number of researchers have therefore suggested that attitudes and moral obligations, in addition to economic calculations or fear of punishment, are important in explaining compliance behaviour and therefore need to be considered when managing non-compliance (Braithwaite, 2002). The core motivations of the accommodative model, therefore, are not to punish an evil, but to repair the harm done and to secure future compliance (Black, 2001).

Related to the accommodative model of compliance behaviour is Tyler's theory on compliance (Tyler, 1990). According to Tyler, people's compliance behaviour is strongly linked to views about *justice* and *injustice*. In particular, he suggests that procedural justice plays an important role in peoples' decision to comply with rules and regulations. Procedural justice concerns the perceived fairness of the procedures involved in decision-making and the perceived treatment one receives from a decision maker. The procedural justice literature demonstrates that people's reactions to their personal experiences with authorities are rooted in their evaluations of the fairness of procedures those agencies use to exercise their Authority (Lind & Tyler, 1988; Tyler & Blader, 2000). In fact, there is empirical evidence to show that people who feel they have been treated in a procedurally fair manner by an organisation will be more likely to trust that organisation (Murphy, 2004), and will be more inclined to accept its decisions and follow its directions (Lind & Tyler, 1988; Tyler & Degoey, 1996). It has also been found that people are more likely to challenge a situation collectively when they believe that the procedures are unfair (Greenberg, 1987; Murphy, 2003; Tyler, 1990).

The procedural justice literature specifically highlights the importance of an authority's trustworthiness, interpersonal respect, and neutrality in its dealings with others (Tyler, 1997). Research has shown that if people believe that an authority has tried to be fair with them, that they have been treated with respect, and that they have been dealt with in an impartial way, then these three factors enhance feelings of fairness. Tyler has specifically shown that people value respectful treatment by authorities and view those authorities that

treat them with respect as more entitled to be obeyed. As people are seldom in the position to know the correct outcome until it is actually made, they focus on the evidence that the procedures are even-handed. Critics of the procedural justice view have suggested that people would care more about the favourability of their outcomes (for example, how much they stood to lose) and less about fairness when the stakes are high. Research has not supported that argument, however. Instead, it has been shown that concerns about fair treatment remain high even when the outcomes are important (Tyler, 1990).

Procedural justice is widely hypothesised to be an antecedent of *legitimacy*. Legitimacy in the context of this paper will be defined as the belief by regulatees that authorities do their job well and are entitled to be obeyed. As noted by Tyler, political theorists have similarly defined legitimacy as ‘the belief within the members of society that there are adequate reasons to voluntarily obey the commands of authorities’ (Tyler, 1997, p. 323). Researchers have shown that people who feel they have been fairly treated by an authority regard their authority status as more legitimate; and this has been found to be regardless of the decision outcome (Magner, Sobery & Welker, 1998; Tyler, 1997). Tyler argues that if an organisation is perceived to be legitimate then people are generally more likely to follow and accept their decisions (Tyler, 1997).

For example, in a study of authorities in political, legal, managerial, educational, and family settings, Tyler found that authorities draw an important part of their legitimacy from their social relationship with group members (Tyler, 1997). Tyler showed that poor treatment by authorities affected views about overall legitimacy, not judgments about gain or loss. In another context, Tyler found that legitimacy was important for encouraging cooperation with the police (Tyler, 2004). Using panel data collected from 830 New Yorkers, Tyler found that citizens of New York were more likely to cooperate with law enforcement officials if they viewed the police as having more legitimacy. Tyler also found that views about procedural justice shaped their overall views about the legitimacy of the police (Tyler, 2004). Taken together, the procedural justice research appears to indicate that fair procedures play a significant role in people’s perceptions of legitimacy, and that these perceptions of legitimacy can in fact go on to influence subsequent cooperation and compliance with authority decisions and rules. If this is indeed the case, then a regulatory

enforcement strategy that makes use of the principles outlined in procedural justice theory may therefore be more effective in gaining future voluntary compliance than a strategy based purely on deterrence.

The present study

The aim of the present study is to explore empirically whether procedural justice and legitimacy play a role in predicting cooperation and compliance in the taxation context. More specifically, the study will test Tyler's assertions that perceptions of procedural justice affect views of legitimacy, not judgements about gain or loss, and that citizens' views about legitimacy can go on to affect their subsequent cooperation and compliance with authority laws and decisions (Tyler, 1997).

Advocates of the deterrence approach would have us believe that economic self-interest factors dominate taxpayers' actions. If this is indeed so, by exploring the situation surrounding a real-life taxation dispute that involves high financial stakes, this study will be able to evaluate the importance of procedural justice and perceived legitimacy.² The mass-marketed tax schemes situation discussed in the introduction was used as a case study to test these issues because it was a situation that many outsiders felt was handled in a procedurally unfair manner by the Tax Office.³ The specific questions of interest in this context, therefore, are (a) whether a regulatory enforcement strategy that has been perceived to be procedurally unjust will affect taxpayers' perceptions of the Tax Office's legitimacy in a negative way, (b) whether these views about procedural injustice will affect taxpayers' perceptions of legitimacy more so than judgements about gain or loss, and (c) whether views about legitimacy will go on to affect subsequent views about cooperation and compliance. Study 1 will explore these questions using cross-sectional survey data collected from taxpayers in 2002 and Study 2 will explore these questions using panel data collected from the same taxpayers in 2004.

² While a number of previous studies have explored the relationship between procedural justice and tax compliance behaviour (Alm, Jackson & McKee, 1993; Feld and Frey, 2002; Wenzel, 2002; Worsham, 1996), none of these studies have explored the relationship between these items, or the role of legitimacy, in the context of a taxation dispute.

Study 1: Cross-sectional data

Method

Participants

A total of 2292 Australian taxpayers participated in Study 1. At the time of participating, all had been accused by the Tax Office of engaging in illegal forms of aggressive tax planning, and all had received notice that they owed the Tax Office significant amounts of unpaid tax, penalties and interest. The average tax debt incurred by participants was AUD\$49 477 (SD = AUD\$83 288) and more than fifty per cent of the participants had not yet paid their tax debts at the time of participating in the study (four years after they had first been asked to pay back their debt).

The participants were between 24 and 81 years of age ($M = 46.50$, $SD = 9.30$), 82% were male, and their average personal income level for the previous financial year was approximately AUD\$73 000 ($SD = AUD\$49 700$).

Procedure

Using Tax Office case files, a 27-page survey booklet was posted to a nationwide random sample of 6000 tax scheme investors in January 2002. The sample was drawn using probability proportional to size sampling within each State and Territory of Australia.

The survey package posted to taxpayers included a cover letter, a survey booklet, and a reply-paid envelope. The cover letter explained the purpose of the study and guaranteed participants strict confidentiality. It also referred participants to a free call number should they have any questions. Non-respondents were followed up over time using a method based on the Dillman Total Design Method (Dillman, 1978). Follow-up of non-respondents was accomplished using an identification number that was affixed to each survey booklet, which was in turn linked to the sample name at the Tax Office.

³ For evidence of this see Senate Economics References Committee (2001; 2002).

In order to protect taxpayers' identities, the Tax Office was responsible for all mailings of the survey and the reminder letters. Participants who agreed to participate were then asked to return their completed surveys back to the Australian National University (ANU) for analysis. This procedure ensured that the researchers did not have access to the names of any taxpayer without their consent, and it also ensured that the Tax Office did not have access to their individual survey responses. A total of six mailings were made, and after a period of 7 months, a total of 2292 useable surveys were received. When adjusted for out-of-scope taxpayers who had died, moved address, or who were incapable of completing the survey (N = 677), this resulted in a response rate of 43%.

Measures

The survey contained 271 questions that were designed to measure attributes of interest such as trust, perceived fairness, legitimacy, and emotional reactions to being penalised. It also included a wide range of questions measuring respondents' attitudes towards the tax system, the Tax Office and of paying tax, and presented a number of questions designed to measure their tax compliance behaviour, and why they may have initially refused to pay back their scheme related tax debts. This paper, however, only deals with those survey questions relevant to six categories of variables: procedural justice, legitimacy, compliance (both psychological and behavioural), economic self-interest concerns (perceived outcome favourability and actual tax debt level), prior conflict with the Tax Office, and demographic control variables.

Procedural Justice. The procedural justice variables used in the present study were designed to assess taxpayers' perceptions about the way they think the Tax Office makes its decisions and treats taxpayers. The procedural justice variables were taken from previous research conducted by Tyler (Tyler, 1997). They were adapted for use in the taxation context and were designed to test Tyler's sub-concepts of trustworthiness, neutrality, and respect. The trustworthiness scale was designed to test whether the Tax Office can be seen to be treating taxpayers in a fair way when it makes its decisions. The measure of neutrality included assessments of the Tax Office's honesty, impartiality, and the use of fact, not personal opinions, in decision-making. Finally, the respect scale

assessed whether the Tax Office is seen to have genuine respect for taxpayers' rights. An overall procedural justice scale (Chronbach's $\alpha = 0.87$) was constructed by combining responses to all three individual scales (M = 2.34, SD = 0.73 out of 5; higher scores represent more positive judgments).

Legitimacy. The two legitimacy scales used were designed to assess (a) the perceived legitimacy of the Tax Office (that is, whether taxpayers felt the Tax Office did its job well; Chronbach's $\alpha = 0.65$; M = 2.16, SD = 0.78 out of 5) and (b) taxpayers' feelings of obligation to obey the Tax Office's directions (Chronbach's $\alpha = 0.64$; M = 1.99, SD = 0.84 out of 5). The variables used to construct these two legitimacy scales were again taken from previous research conducted by Tyler (Tyler, 1997), but were adapted for use in the taxation context.

Compliance. Braithwaite argues that both taxpayers' attitudes towards the tax system and paying tax, and their taxpaying behaviour should be considered when investigating overall levels of non-compliance (Braithwaite, 2003). The present study therefore used two measures of tax non-compliance: one attitudinal measure and one behavioural measure.

For the attitudinal measure of non-compliance, respondents were presented with six questions. These six questions were adapted from Braithwaite's work in the nursing home context (Braithwaite, 1995), and were designed to measure the degree of psychological resistance taxpayers held towards the Tax Office (Chronbach's $\alpha = 0.67$; M = 3.73, SD = 0.58 out of 5). A high resistance score reflects doubts about the intentions of the Tax Office to behave cooperatively and benignly towards those it regulates and provides a rhetoric for calling on taxpayers to be watchful, to fight for their rights, and to curb Tax Office power (Braithwaite, 2003).

For the behavioural measure of non-compliance, four questions were used to assess the extent to which respondents admitted to engaging in real acts of tax evasion in the past 12 months. These acts of non-compliance included whether the taxpayer had an outstanding scheme-related tax debt (yes or no), whether they had worked for cash-in-hand payments

for which tax was not paid (yes or no), whether they had exaggerated their deductions or rebates (yes or no) and whether they were unsure that the deductions they made were legitimate (yes or no). A 'tax evasion' index was constructed by adding up the number of 'yes' responses (a score of 0 reflects complete compliance, whereas a score of 4 reflects serious non-compliance; $M = 0.77$, $SD = 0.67$).

Both the attitudinal and behavioural measures of tax non-compliance can therefore be seen to be measures of investors' views towards compliance and actual compliance behaviour four years after they had been initially detected and punished by the Tax Office.

Economic self-interest concerns. Two measures were used to assess taxpayers' economic self-interest concerns. First, the outcome favourability scale was adapted from Tyler's instrumental judgement index (Tyler, 1997). This measure refers to the perceived outcome favourability to oneself of the tax authority's decision processes (Chronbach's $\alpha = 0.70$; $M = 2.57$, $SD = 1.02$ out of 5). Second, taxpayers were asked to provide an estimate of how much their scheme related tax debt was (that is, how much the Tax Office says they owed; $M = \$49\,477$, $SD = \$83\,289$).

Prior conflict with the Tax Office. Two questions were used to assess the extent to which respondents had a history of conflict with the Tax Office. These included whether the taxpayer had ever been penalised or fined by the Tax Office in the past, and whether they had previously been subjected to an audit or other investigation (1 = Never, 2 = Once, 3 = More than once). By including this two-item index in the analysis, it could control for the differences between those who had had conflict with the Tax Office prior to their involvement in schemes and those who had not ($M = 1.55$, $SD = 0.54$).

Demographic variables. A number of demographic variables were also used as control variables in the analysis. Specifically, survey respondents were asked to indicate their age, sex (0 = male, 1 = female), personal income (on a scale from 0 to 250+ thousand dollars) and highest educational level attained (on a scale from 0 (no formal schooling) to 8 (post-graduate degree)).

Results

The results presented in the present study consist of taxpayers' responses to the measures described in the Method section above. There were two primary goals of the present study: (a) to test Tyler's assertion that poor treatment by authorities can go on to affect taxpayer's views about overall legitimacy, not judgements about gain or loss; and (b) to explore whether views of legitimacy can affect subsequent behaviour and views about compliance. In order to test these ideas, a series of four hierarchical regression analyses were performed on the data collected in 2002.

The effects of procedural justice on legitimacy?

To address the first goal of this study, two hierarchical regression analyses were performed. The first regression analysis used 'prior conflict', 'tax debt' level, 'outcome favourability', and 'procedural justice' as predictors of perceived 'legitimacy' of the Tax Office. The second regression analysis used 'prior conflict', 'tax debt' level, 'outcome favourability', and 'procedural justice' as predictors of 'obligation to obey' the Tax Office. For both regression analyses, the background variables of 'age', 'sex', 'personal income', and 'education level' were entered as predictors into the first step of the analysis to control for demographic differences between respondents.

a) Predicting perceived 'legitimacy' of the Tax Office

Table 1 presents the findings of the first hierarchical regression analysis. It can be seen from Table 1 that 55% of the variation in taxpayer 'legitimacy' judgments can be explained by all of the variables in the model. As noted above, demographic control variables were entered into the first step of the regression analysis. To identify the unique contribution offered by the other four predictor variables of interest, 'prior conflict' was entered separately into the regression model at Step 2, followed by 'tax debt' at Step 3, 'outcome favourability' at Step 4, and 'procedural justice' at Step 5.

The two economic self-interest variables were entered into the model before the measure of procedural justice because Tyler claims that perceptions of unfair treatment affect

judgments of legitimacy more so than judgments about gain and loss (Tyler, 1997). If this assertion is correct, then the R^2 change value between Steps 4 and 5 of the model should be greater than the R^2 change between Steps 2 and 3 and between Steps 3 and 4.

As can be seen in Table 1, the last four steps of the analysis uniquely explained significant portions of the variance (1%, 1%, 15%, and 38%, respectively). Inspection of the results at the most complete fifth step reveal that once all variables were entered into the model, only ‘outcome favourability’ and ‘procedural justice’ were significant predictors of ‘legitimacy’. Interestingly, ‘prior conflict’ had no effect on taxpayers’ ‘legitimacy’ judgments ($\beta = -0.002$, $p > 0.85$). This is an important finding as it suggests that those who have had more conflict with the Tax Office in the past were not more likely to make negative legitimacy judgments about the Tax Office than taxpayers who have never had any conflict with the Tax Office prior to their scheme involvement.

From Table 1, it can also be seen that the ‘procedural justice’ measure had a positive effect on ‘legitimacy’ ($\beta = 0.70$, $p < 0.001$), indicating that taxpayers who felt the Tax Office treats taxpayers in a procedurally fair manner were more likely to make positive judgments about the Tax Office’s legitimacy than taxpayers who felt the Tax Office treats taxpayers in a procedurally unfair manner. When it came to the self-interest variable ‘outcome favourability’, it was found that this item also had a significant positive effect on ‘legitimacy’ ($\beta = 0.08$, $p < 0.001$). This finding indicates that taxpayers who thought their outcome was less favourable were more likely to make negative judgements about the Tax Office’s legitimacy. This finding suggests that judgments about gain or loss do play a significant role in people’s perceptions of legitimacy in the taxation context. However, as can be seen by the magnitude of the change in R^2 between Steps 3 and 4 and between Steps 4 and 5 (0.15 and 0.38, respectively), the self-interest variable did not have the strongest effect on perceptions of legitimacy. In general, perceptions of unfair treatment appear to have affected taxpayers’ judgments of legitimacy more so than having received an unfavourable outcome.

Table 1: Hierarchical regression analysis showing predictors of ‘legitimacy’

Predictor	Step				
	1	2	3	4	5
Age	0.03	0.03	0.04	-0.02	-0.02
Sex	0.02	0.01	0.01	0.01	0.01
Income	-0.04	-0.04	-0.01	-0.01	-0.02
Education level	0.03	0.03	0.03	-0.01	-0.02
Prior conflict		-0.09***	-0.09***	-0.01	-0.00
Tax debt			-0.12***	-0.08***	-0.00
Outcome favourability				0.40***	0.08***
Procedural justice					0.70***
<u>R²</u>	0.00	0.01	0.03	0.17	0.55
<u>Adjusted R²</u>	0.00	0.01	0.02	0.17	0.55
<u>R² change</u>	0.00	0.01	0.01	0.15	0.38
<u>F change</u>	1.73	17.56***	26.39***	353.73***	1682.19***
<u>df</u>	4, 2011	1, 2010	6, 2009	1, 2008	1, 2007

Note. Predictor entries are standardised regression coefficients (β).

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

b) Predicting ‘obligation to obey’ the Tax Office

One’s obligation to obey an authority’s rules and decisions is another measure of an authority’s legitimacy (Tyler, 1997). A second hierarchical regression analysis was therefore conducted which used ‘demographics’, ‘prior conflict’, ‘tax debt’, ‘outcome favourability’, and ‘procedural justice’ as predictors of ‘obligation to obey’ the Tax Office. Like in the previous regression analysis, the self-interest variables of ‘tax debt’ and ‘outcome favourability’ were entered into the model before the ‘procedural justice’ measure. Table 2 presents the findings of this regression analysis.

It can be seen from Table 2 that when all variables were entered into the analysis, 10% of the variation in ‘obligation to obey’ could be explained. It can also be seen that the regression analysis failed to explain a significant portion of the variance at Step 1 and Step 2, indicating that the demographic variables and prior conflict with the Tax Office did not have any effect on taxpayers’ obligation to obey Tax Office decisions and rules. In contrast, Steps 3, 4 and 5 each explained significant and unique portions of the variance (1%, 2%, and 7%, respectively). However, once all items were entered into the model, only the ‘procedural justice’ measure had a significant effect on taxpayers’ ‘obligation to obey’

the Tax Office. Specifically, ‘procedural justice’ was found to have a significant positive effect on ‘obligation to obey’ the Tax Office ($\beta = 0.31$, $p < 0.001$), indicating that taxpayers who felt the Tax Office treats taxpayers in a procedurally fair manner were more likely to feel an obligation to also obey the Tax Office. The findings from the second regression analysis therefore support Tyler’s suggestion that citizens’ judgments about gain and loss do not affect their feelings of obligation to obey an authority; it is their perceptions of procedural justice that are important.

Table 2: Hierarchical regression analysis showing predictors of ‘obligation to obey’

Predictor	Step				
	1	2	3	4	5
Age	0.01	0.01	0.01	-0.01	-0.01
Sex	0.01	0.01	0.01	0.00	0.01
Income	-0.01	-0.01	0.01	0.01	0.00
Education level	0.04	0.04	0.04	0.02	0.02
Prior conflict		-0.04	-0.03	-0.01	-0.00
Tax debt			-0.07***	-0.05*	-0.02
Outcome favourability				0.15***	0.01
Procedural justice					0.31***
<u>R²</u>	0.00	0.00	0.01	0.03	0.10
<u>Adjusted R²</u>	0.00	0.00	0.01	0.03	0.10
<u>R² change</u>	0.00	0.00	0.01	0.02	0.07
<u>F change</u>	0.76	2.88	9.11**	43.57***	164.66***
<u>df</u>	4, 1995	1, 1994	6, 1993	1, 1992	1, 1991

Note. Predictor entries are standardised regression coefficients (β).

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

The effects of legitimacy on subsequent non-compliance

In the two analyses performed above it was found that taxpayers who felt the Tax Office treats taxpayers in a procedurally unfair manner were more likely to question the legitimacy of the Tax Office and were less obligated to follow its directions. Do those taxpayers who question the legitimacy of the Tax Office also have higher levels of tax non-compliance? This question was also of interest in Study 1.

As noted earlier, Braithwaite argues that both taxpayers’ attitudes towards compliance, and their taxpaying behaviour should be considered when investigating overall levels of tax

non-compliance (Braithwaite, 2003). As a result, two hierarchical regression analyses were conducted to explore the effect of legitimacy concerns on subsequent taxpayer compliance. The first analysis concentrates on attitudinal compliance and the second concentrates on self-reported behavioural compliance.

a) Predicting attitudinal compliance (Resistance)

An interesting aspect of the tax case study discussed here is that the majority of taxpayers involved actively resisted the Tax Office's attempts to recover their tax debts. Four years after the Tax Office first took enforcement action against the 42 000 taxpayers involved, more than 50% of the taxpayers refused to pay back their scheme related tax debts. However, when also asked about their views towards the Tax Office and cooperating with them, it was found that the majority of these taxpayers also held extremely resistant views towards the Tax Office. Of interest here was whether these resistant views towards the Tax Office were related to their views about the Tax Office's legitimacy. Were those who questioned the Tax Office's legitimacy more likely to be resistant, or were these taxpayers simply resistant because the financial stakes were so high?

To answer these questions, a regression analysis was performed using 'prior conflict', 'tax debt', 'outcome favourability', 'obligation to obey', and 'legitimacy' as predictors of 'resistance'. To control for demographic differences between respondents, the background variables, 'age', 'sex', 'personal income' and 'education level' were again used as predictors in the first step of the regression model. The 'prior conflict' item was then entered as a control variable at Step 2. The two measures of economic self-interest ('tax debt' and 'outcome favourability') were entered into the analysis at Step 3, followed by the two measures of legitimacy ('obligation to obey' and 'legitimacy') at Step 4.

First, it should be noted that each of the four steps of the model uniquely explained significant portions of the variation in taxpayers' 'resistance'. Upon inspection of Table 3, it can be seen that 35% of the variation in taxpayers' 'resistance' could be explained by all of the variables in the model. Inspection of the individual variables shows that three demographic variables significantly predicted the level of resistance exhibited by

taxpayers. 'Age' was found to have a weak positive effect on taxpayer resistance ($\beta = 0.04$, $p < 0.03$), and both 'education level' and 'personal income level' were found to have a weak negative effect on taxpayer resistance ($\beta = -0.06$, $p < 0.01$; and $\beta = -0.04$, $p < 0.03$, respectively). These findings indicate that older taxpayers, those who were less educated, and those who had lower levels of income were more likely to express higher levels of resistance towards that Tax Office.

It can also be seen from Table 3, that 'prior conflict' with the Tax Office had no effect on taxpayer 'resistance' levels ($\beta = 0.02$, $p > 0.40$), suggesting that those who have had more prior conflict with the Tax Office were not more likely to hold resistant views about the Tax Office than those who have had less prior conflict. Of the two economic self-interest variables, only 'outcome favourability' was found to have a significant effect on taxpayer 'resistance' and this effect was negative ($\beta = -0.14$, $p < 0.001$); indicating that those who felt they had received a less favourable outcome were more resistant. Finally, both of the legitimacy items were found to have negative effects on taxpayer 'resistance' ($\beta = -0.10$, $p < 0.001$ for 'obligation to obey'; and $\beta = -0.48$, $p < 0.001$ for 'legitimacy'), indicating that those who felt more obliged to obey the Tax Office and those who perceived the Tax Office as having greater legitimacy were less likely to hold resistant views towards the Tax Office. Of all of the significant predictors, however, the legitimacy items together were able to uniquely explain most of the variation in taxpayer resistance (R^2 change = 0.22). Taken together, the findings from this regression analysis suggest that views about legitimacy may be the key to predicting taxpayers' views about compliance.

Table 3: Hierarchical regression analysis showing predictors of ‘resistance’

Predictor	Step			
	1	2	3	4
Age	0.01	0.01	0.05*	0.04*
Sex	-0.03	-0.02	-0.01	-0.01
Income	-0.01	-0.01	-0.04	-0.04*
Education level	-0.09***	-0.09***	-0.05*	-0.06**
Prior conflict		0.09***	0.02	0.02
Tax debt			0.07***	0.03
Outcome favourability			-0.34***	-0.14***
Obligation to obey			0.11***	-0.10***
Legitimacy				-0.48***
<u>R²</u>	0.01	0.02	0.13	0.36
<u>Adjusted R²</u>	0.01	0.02	0.13	0.35
<u>R² change</u>	0.01	0.01	0.12	0.22
<u>F change</u>	4.69**	16.67***	134.28***	341.30***
<u>df</u>	4, 1996	1, 1995	2, 1993	2, 1991

Note. Predictor entries are standardised regression coefficients (β).

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

b) Predicting behavioural compliance

Finally, in order to assess whether views of legitimacy also affected behavioural non-compliance, a second hierarchical regression analysis was performed using ‘prior conflict’, ‘tax debt’, ‘outcome favourability’, ‘obligation to obey’, and ‘legitimacy’ as predictors of ‘tax evasion’. As noted earlier, to assess the behavioural measure of non-compliance, a four-question item was used to assess the extent to which respondents admitted to engaging in real acts of tax evasion in the past 12 months. Like in the previous analysis, the four demographic control variables ‘sex’, ‘age’, ‘personal income’ and ‘education level’ were entered into the regression analysis at Step 1. This was followed by ‘prior conflict’ at Step 2, ‘tax debt’ and ‘outcome favourability’ at Step 3, and finally ‘obligation to obey’ and ‘legitimacy’ at Step 4.

As can be seen in Table 4, only three of the four steps of the model uniquely explained significant portions of the variation in taxpayers’ ‘tax evasion’ behaviour. Entry of ‘prior conflict’ at Step 2 had no effect on the model. It should be noted, however, that only 2% of the overall variation in tax evasion behaviour could be explained by the variables entered

into the model. As a result, the conclusions drawn from this specific analysis should be taken with caution.

Inspection of the coefficients at the final step shows that ‘sex’ had a weak but significant negative effect on ‘tax evasion’ behaviour ($\beta = -0.05$, $p < 0.04$). This finding suggests that men are more likely than women to engage in subsequent tax evasion behaviour. The findings also suggest that ‘tax debt’ significantly predicted subsequent tax evasion behaviour ($\beta = 0.09$, $p < 0.001$), with those having larger tax debts being more likely to engage in subsequent tax evasion behaviour. The ‘legitimacy’ measure was not found to predict tax evasion behaviour ($\beta = 0.02$, $p > 0.39$), but it was found that ‘obligation to obey’ had a significant negative effect on tax evasion behaviour ($\beta = -0.10$, $p < 0.001$). This finding indicates that those with a greater sense of obligation to obey the Tax Office were subsequently less likely to engage in tax evasion behaviour four years after being punished. While the significant items are not contributing much to the variation in tax evasion behaviour, the findings do suggest that views about legitimacy might be important in predicting such illegal behaviour.

Table 4: Hierarchical regression analysis showing predictors of ‘tax evasion’ behaviour

Predictor	Step			
	1	2	3	4
Age	-0.04	-0.04	-0.04	-0.04
Sex	-0.05*	-0.05*	-0.05	-0.05*
Income	-0.00	-0.00	-0.02	-0.02
Education level	-0.03	-0.03	-0.02	-0.02
Prior conflict		0.01	-0.00	-0.00
Tax debt			0.09***	0.09***
Outcome favourability			-0.03	-0.03
Obligation to obey				-0.10***
Legitimacy				0.02
<u>R²</u>	0.01	0.01	0.02	0.02
<u>Adjusted R²</u>	0.00	0.00	0.01	0.02
<u>R² change</u>	0.01	0.00	0.01	0.01
<u>F change</u>	2.58*	0.28	9.41***	9.43***
<u>df</u>	4, 1973	1, 1972	2, 1970	2, 1968

Note. Predictor entries are standardised regression coefficients (β).
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Path analysis

One of the major disadvantages about using a series of regression analyses is that they cannot reveal the relationships that exist between all of the variables of interest. Likewise, they are unable to tell us anything about the possible causal relationships between the variables. In order to address these issues, therefore, the variables used in the four regression analyses presented earlier were subjected to a path analysis using Analysis of Moment Structures (AMOS).⁴

The final model is presented in Figure 1. According to the goodness-of-fit indices presented in Table 5, addition or deletion of any further pathways could not improve the model. It was found that low to moderate levels of variance were explained in ‘tax evasion’ ($R^2 = 0.03$) and ‘obligation to obey’ the Tax Office ($R^2 = 0.12$) while a substantial amount of variance was explained in perceived ‘legitimacy’ ($R^2 = 0.54$) and ‘resistance’ ($R^2 = 0.40$).

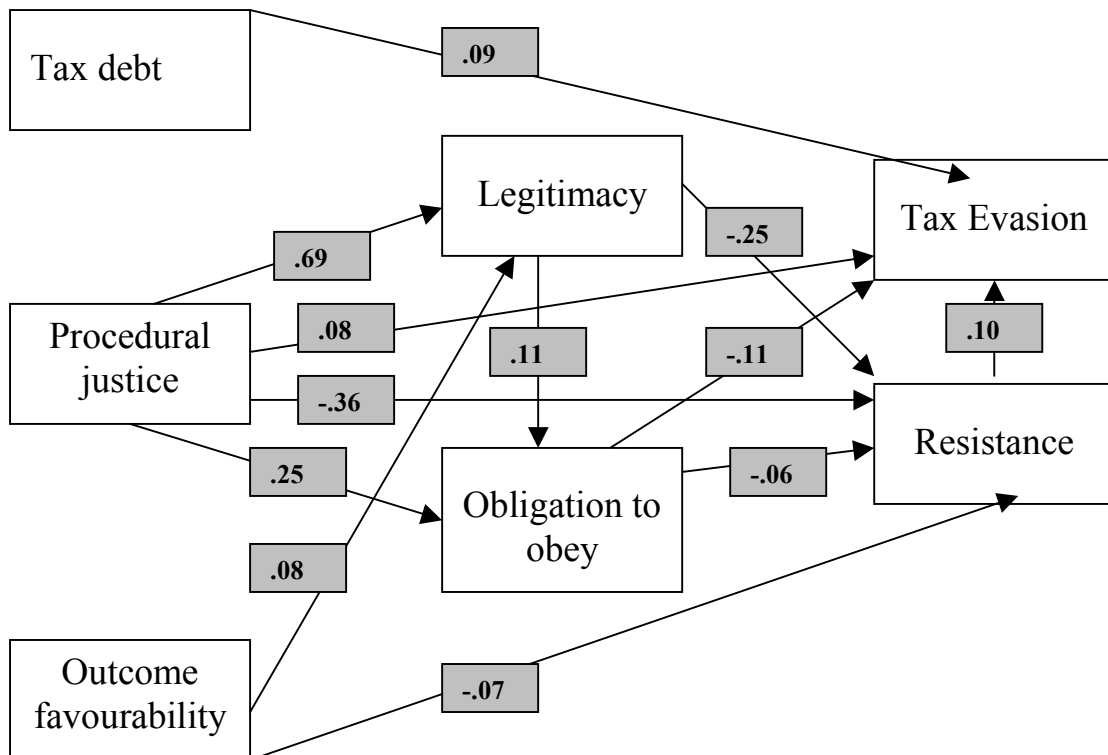


Figure 1: Structural equation model demonstrating the relationship between measures of interest.

⁴ The demographic control variables and the ‘prior conflict’ variable were not included in this analysis.

As can be seen from Figure 1, the major variable affecting views about legitimacy was the procedural justice item. This suggests that those who felt the Tax Office treats taxpayers in a procedurally fair way were less likely to question the legitimacy of the Tax Office ($\beta = 0.69$ for legitimacy; and $\beta = 0.25$ for obligation to obey). Like in the regression analyses, 'tax debt' level and perceptions of 'outcome favourability' were found to play little role in the formation of views of legitimacy. Although the relationship between 'outcome favourability' and 'legitimacy' was significant, the standardised path coefficient was somewhat weak ($\beta = 0.08$) and contributed little to the variation in legitimacy. It was also found that perceptions of 'legitimacy' influenced feelings of 'obligation to obey' the Tax Office ($\beta = 0.11$); those that viewed the Tax Office as having more legitimacy were also more likely to feel obligated to obey its decisions. These findings therefore support those of the first two regression analyses and support Tyler's assertion that perceptions of procedural justice generally affect views of legitimacy, not judgements about gain or loss.

The path analysis also shows four variables having a direct effect on taxpayer resistance. Those who believed their 'outcome' was less favourable were more likely to be 'resistant' towards the Tax Office, although this relationship was somewhat weak ($\beta = -0.07$). It was also found that those who thought the Tax Office had more 'legitimacy' and those who were more 'obliged to obey' the Tax Office were also less likely to be 'resistant' towards the Tax Office ($\beta = -0.25$ and $\beta = -0.06$, respectively). Finally, it was found that perceptions of 'procedural justice' had a direct negative effect on 'resistance' ($\beta = -0.36$), suggesting that those with greater perceptions of procedural justice were less likely to be resistant.

Two other aspects of the path diagram in Figure 1 that should be highlighted are the relationships (a) between the debt level and tax evasion items, and (b) between the two compliance measures. It was found that taxpayers who had larger tax debts were more likely to report evading their taxes in the future ($\beta = 0.09$). Resistance was also found to have a significant positive effect on tax evasion behaviour ($\beta = 0.11$), indicating that those who held more resistant attitudes towards the Tax Office were more likely to become involved in tax evasion behaviour than those who held less resistant views. These two

specific findings are important as they have serious implications for how regulators should interact with and punish taxpayers.⁵

Table 5: Chi-Square statistics and goodness-of-fit indices for the Structural Equation Model linking compliance to measures of legitimacy and procedural justice

Goodness of fit statistics	Structural equation model
χ^2	3.29, $p < 0.66$
df	5
Comparative fit index	1.00
Goodness of fit index	1.00
Adjusted goodness of fit index	0.99
Root mean square	0.00

Overall, these findings support those of the regression analyses presented earlier: poor treatment by a regulatory authority can undermine legitimacy, which in turn can lead to increased resistance and non-compliance towards decisions and rules. Given the cross-sectional nature of the data, however, some may question the direction of causality proposed in the path model. For example, does poor treatment by an authority ultimately lead to perceptions of decreased legitimacy, or do those who have lower perceptions of legitimacy interpret their treatment by authorities as procedurally unfair to justify their feelings? Likewise, do perceptions of legitimacy affect compliance levels or do non-compliant people generally question the legitimacy of authorities to justify their non-compliance? Questions such as these cannot be answered definitively with cross-sectional data. The aim of Study 2, therefore, was to report the findings of panel data collected 2 ½ years later from the same group of taxpayers.

⁵ A somewhat unusual finding from the model was the significant positive relationship between ‘procedural justice’ and ‘tax evasion’ ($\beta = 0.08$), suggesting that those who felt the Tax Office treats taxpayers in a procedurally fair way were more likely to engage in subsequent tax evasion behaviour. This finding is difficult to explain theoretically, especially when one considers the findings reported in this study. The direction of the relationship appears counter-intuitive and it is suggested that it may simply reflect a statistical anomaly (this is due to the fact that the bi-variate correlation between ‘tax evasion’ and ‘procedural justice’ measures was found to be negative and insignificant, $r = -0.01$, $p > 0.26$, indicating no relationship between the two measures).

Study 2: Panel data

Method

Participants and procedure

The data in Study 2 were taken from a follow-up survey of the taxpayers who participated in Study 1. In the original 2002 survey, 1250 taxpayers indicated that they would be willing to participate in a follow-up study and provided ANU researchers with their contact details.⁶ In August 2004 (2½ years after the original survey), these 1250 taxpayers were contacted and asked to fill in a 28-page survey that contained many of the same concepts that were measured in the first survey. Using the same procedure as the 2002 survey, a total of 659 useable surveys were finally received. When adjusting for people who had moved address, had died, or were incapable of completing the survey (N = 146), the response rate was 60%. Survey data from the original and follow-up surveys were then merged using the participants' unique identifier number.

Results

Like in the original survey, the six categories of variables used in Study 2 included measures of procedural justice (Chronbach's $\alpha = 0.89$, M = 2.27, SD = 0.72), legitimacy (legitimacy; Chronbach's $\alpha = 0.62$, M = 2.09, SD = 0.81; obligation to obey; Chronbach's $\alpha = 0.70$, M = 2.35, SD = 0.93), compliance (resistance; Chronbach's $\alpha = 0.65$, M = 3.67, SD = 0.56; tax evasion, M = 0.53, SD = 0.70), economic self-interest concerns (outcome favourability; Chronbach's $\alpha = 0.64$, M = 2.56, SD = 0.88; tax debt), prior conflict with the Tax Office (M = 1.16, SD = 0.32), and demographic control variables. All measures were identical to those used in Study 1.

(a) Predicting legitimacy using panel data

In order to assess whether perceptions of procedural unfairness causally affected taxpayers' perceptions of legitimacy (see Table 6), two regressions were performed which regressed judgments of 'procedural justice' and 'outcome favourability' at Time 2 on

⁶ This process enabled the researchers to contact the taxpayers directly without having to go through the Tax Office.

‘legitimacy’ at Time 2 (Model 1) and ‘obligation to obey’ at Time 2 (Model 2). This was done while controlling for Time 1 ‘legitimacy’ or Time 1 ‘obligation to obey’. This type of analysis enables one to explore which factors predict changes in legitimacy judgments over time.

It can be seen from Table 6 that judgments about the Tax Office’s legitimacy were moderately stable over time ($\beta = 0.24, p < 0.001$ and $\beta = 0.37, p < 0.001$ for ‘legitimacy’ (Model 1) and ‘obligation to obey’ (Model 2), respectively); those with greater perceptions of legitimacy/greater obligation to obey at Time 1 were also more likely to make positive judgments about the Tax Office’s legitimacy at Time 2. More importantly, however, procedural justice was found to shape changes in legitimacy judgments ($\beta = 0.54, p < 0.001$) and people’s obligation to obey the Tax Office ($\beta = 0.23, p < 0.001$). It was also found that outcome favourability judgments at Time 2 also predicted changes in people’s perceptions of legitimacy ($\beta = 0.12, p < 0.001$). While the influence of procedural justice judgments was stronger when predicting ‘legitimacy’/‘obligation to obey’ at Time 1 (cf. Tables 1 and 2, respectively) than when predicting changes in ‘legitimacy’/‘obligation to obey’ between Times 1 and 2 (see Model 1 and 2 of Table 6, respectively), the findings are important because they support the contention made in Study 1 that poor treatment by authorities can lead to negative changes in people’s legitimacy judgments.

Table 6: Regression analysis using longitudinal data to predict changes in legitimacy

Predictor	Legitimacy	
	Wave 2 'legitimacy' (Model 1)	Wave 2 'obligation to obey' (Model 2)
Wave 1 measures		
Outcome favourability	0.01	-0.01
Procedural justice	0.00	-0.08
Wave 2 measures		
Outcome favourability	0.12***	0.03
Procedural justice	0.54***	0.23***
Wave 1 legitimacy	0.24***	----
Wave 1 obligation to obey	----	0.37***
Demographics		
Age	-0.00	-0.11**
Sex	0.03	-0.09*
Income	0.06*	-0.04
Education level	0.02	0.13***
Tax debt	-0.02	-0.02
Prior conflict	0.05	0.06
<u>R</u> ²	0.58	0.24
<u>Adjusted R</u> ²	0.57	0.22
<u>F</u>	70.86***	15.75***
<u>df</u>	11, 561	11, 556

Note. Predictor entries are standardised regression coefficients (β).

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

(b) Predicting compliance using panel data

In order to test whether legitimacy judgments causally affected taxpayer compliance (see Table 7), two regressions were performed which regressed 'legitimacy' judgments and 'outcome favourability' at Time 2 on 'resistance' at Time 2 (Model 3) and 'tax evasion' behaviour at Time 2 (Model 4). This was done while controlling for Time 1 'resistance' or Time 1 'tax evasion' behaviour. Like in the previous analysis, this type of analysis enables one to explore which factors predict changes in compliance over time.

It can be seen from Table 7 that compliance levels were moderately stable over time ($\beta = 0.34$, $p < 0.001$ and $\beta = 0.31$, $p < 0.001$ for 'resistance' and 'tax evasion' behaviour, respectively); those who were more resistant or who engaged in tax evasion at Time 1 were also more likely to be resistant or to engage in tax evasion at Time 2. It can also be seen in

Model 3 that legitimacy judgments were found to play an important role in predicting changes in resistance ($\beta = -0.35$, $p < 0.001$ and $\beta = -0.09$, $p < 0.05$ for ‘legitimacy’ and ‘obligation to obey’, respectively). It can also be seen in Model 3 that ‘outcome favourability’ judgments made at Time 2 predicted changes in taxpayers’ resistant attitudes ($\beta = -0.11$, $p < 0.01$). These findings in particular are important as they support the statement made in Study 1 that negative perceptions of legitimacy can lead to unwanted changes in taxpayer resistance levels.

The role of perceived legitimacy in predicting ‘tax evasion’ behaviour, however, appears to be a little more complicated. In Study 1, ‘obligation to obey’ was found to predict a taxpayers’ level of tax evasion at Time 1. However, in Study 2, legitimacy judgments were not found to predict changes in tax evasion behaviour across time ($\beta = -0.04$ and $\beta = -0.02$ for ‘legitimacy’ and ‘obligation to obey’, respectively). Instead, it was found that a taxpayers’ age ($\beta = -0.09$, $p < 0.05$) and their level of tax debt ($\beta = 0.09$, $p < 0.05$) predicted changes in their tax evasion behaviour between Times 1 and 2; those who were younger and who had larger tax debts at Time 1 were subsequently more likely to evade taxes at Time 2. The latter finding is particularly interesting as it suggests that harsh and excessive monetary penalties can in fact have long-term negative effects on compliance behaviour.

It was also found that the ‘outcome favourability’ judgments made at Time 1 and ‘tax evasion’ behaviour at Time 1 predicted changes in tax evasion behaviour; those who made more negative judgments about their outcome at Time 1 ($\beta = -0.11$, $p < 0.001$) and those who were more non-compliant at Time 1 ($\beta = 0.31$, $p < 0.001$) were also more likely to report evading their taxes at Time 2. In fact, this analysis reveals that the best predictor of subsequent tax evasion behaviour at Time 2 was whether the taxpayer engaged in tax evasion behaviour at Time 1.

Table 7: Regression analysis using longitudinal data to predict changes in compliance

Predictor	Compliance	
	Wave 2 'resistance' (Model 3)	Wave 2 'tax evasion' (Model 4)
Wave 1 measures		
Outcome favourability	-0.03	-0.11*
Legitimacy	-0.02	0.01
Obligation to obey	0.04	-0.07
Wave 2 measures		
Outcome favourability	-0.11**	0.06
Legitimacy	-0.35***	-0.04
Obligation to obey	-0.09*	-0.02
Wave 1 resistance	0.34***	----
Wave 1 tax evasion	----	0.31***
Demographics		
Age	0.05	-0.09*
Sex	-0.01	-0.05
Income	0.01	-0.07
Education level	0.00	-0.00
Tax debt	0.02	0.09*
Prior conflict	0.05	-0.04
<u>R²</u>	0.47	0.15
<u>Adjusted R²</u>	0.46	0.13
<u>F</u>	37.76***	7.49***
<u>df</u>	13, 549	13, 534

Note. Predictor entries are standardised regression coefficients (β).

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

General discussion

This study was interested in testing Tyler's assertion that (a) perceptions of procedural justice affect people's views about overall legitimacy, not views about gain or loss, and (b) that these views about legitimacy can affect subsequent compliance with an authority's decisions and rules. By examining taxpayers involved in a long-standing dispute with the Tax Office, the study was able to address these claims in a situation that involved high financial stakes; a situation where economic self-interest concerns were expected to be high.

To summarise, it was found in Study 1 that taxpayers who had been punished by the Tax Office were more likely to make negative judgments about the Tax Office's legitimacy

when they felt the Tax Office treated taxpayers in a procedurally unfair manner. It was also found that economic self-interest concerns did play a role in taxpayers' views of legitimacy, but only a minor role. Further, when exploring taxpayers' subsequent attitudes towards compliance in Study 1, it was found that views about legitimacy significantly predicted taxpayer resistance levels towards the Tax Office. Those with more negative views about legitimacy were more resistant than those with more positive views about the Tax Office's legitimacy. Finally, it was found that financial self-interest concerns and perceptions about legitimacy predicted subsequent tax evasion behaviour in Study 1. Those who had higher tax debts and those who felt less obligated to obey the Tax Office were more likely to report they had engaged in real acts of tax evasion four years after they had been punished by the Tax Office. The path analysis presented in Figure 1 revealed that many of the relationships found in the regression analyses were confirmed. The path analysis also showed that taxpayers' debt level and their resistant attitudes towards the Tax Office both predicted subsequent levels of tax evasion behaviour. This particular finding suggests that the more disgruntled taxpayers were attempting to recoup the losses they had incurred from their tax debts by subsequently engaging in tax evasion behaviour.

Findings from the longitudinal analysis in Study 2 were supportive of the cross-sectional data. The causal relationships between the variables of interest were examined and it was found that over time, procedural justice judgments do predict changes in perceived legitimacy more so than judgments about gain or loss, and that these judgments of legitimacy can go on to influence views about compliance. However, the panel data differed slightly from the cross-sectional analysis when predicting actual tax compliance behaviour. In Study 2, perceptions of legitimacy were not found to predict changes in tax evasion behaviour between Time 1 and 2. An important finding, however, was that those who had bigger fines for their scheme involvement were subsequently more likely to evade taxes at Time 2, suggesting that harsh and excessive civil penalties for tax non-compliance can have long-term negative effects on compliance behaviour.

Implications for procedural justice research

The first point to make about the findings is that they are broadly supportive of Tyler's work on legitimacy. As discussed earlier, Tyler found evidence across a number of different settings that views about an authority's legitimacy were shaped by judgments about the way that authority treats its citizens (Tyler, 1997, 2004). The present study was also able to show that perceptions of procedural justice strongly shaped views about the legitimacy of the Tax Office (this was found both cross-sectionally and longitudinally). Tyler has also shown that feelings of legitimacy determine the level of cooperation exhibited by citizens; those who view an authority as having more legitimacy are more likely to cooperate and comply with that authority. Findings from the present study also support this notion. It was found that taxpayers who had made more negative legitimacy ratings about the Tax Office were more likely to hold resistant attitudes towards compliance. These feelings of resistance, coupled with their obligation to obey the Tax Office's decisions and rules, went on to predict tax evasion behaviour in the cross-sectional analysis. When analysing the longitudinal data, it was also found that negative legitimacy ratings predicted changes in resistant attitudes towards the Tax Office; those who developed more negative judgments about the Tax Office's legitimacy at Time 2 were also more likely to become resistant towards the Tax Office.

It was also found in the present study that judgments about gain and loss were important to taxpayers and that these helped to shape their views about the Tax Office's legitimacy. For example, those who felt they had received an unfavourable outcome from the Tax Office were significantly more likely to question the Tax Office's legitimacy. These findings may not be surprising, however, when one considers the context. One could argue that the area of taxation is very much dominated by financial self-interest concerns. In the case of the scheme investors, many had claimed scheme related tax deductions six years earlier, had received a substantial amount of money back from the Tax Office as a result, yet were told six years later that they had to pay these deductions back with interest and penalties. It is therefore not surprising that judgments about gain and loss played a significant role in this context.

The point to make about the findings, however, is that taxpayers' feelings about the way they felt treated by the Tax Office appeared to be more important in explaining their views about the Tax Office's legitimacy than their judgments about gain or loss. Thus, the findings overall provide general support for Tyler's assertion that perceptions of procedural justice affect views about legitimacy more so than judgments about gain and loss, and that these views about legitimacy can go on to affect views about compliance.

Implications for regulatory enforcement models

While the present study has been able to lend support to Tyler's theory of procedural justice and legitimacy, the findings of the present study also have wider implications for the area of regulatory enforcement. A question that was raised in the introduction to this paper was how tax authorities should best regulate taxpayers who may have inadvertently become involved in aggressive tax planning. The Tax Office's approach in the case of tax scheme investors was to use a deterrence approach. The findings from the present study revealed that taxpayers who were less satisfied with the Tax Office's treatment of taxpayers were (a) more likely to question the Tax Office's legitimacy, (b) were more likely to hold resistant views towards the Tax Office, and (c) were more likely to report evading their taxes in subsequent years. Hence, these findings suggest that the Tax Office's initial use of a deterrence based strategy was counterproductive. Not only did the majority of the taxpayers involved refuse to pay their tax debts for more than four years, but many also developed long-term resistant attitudes towards the Tax Office and were more likely to be become engaged in further acts of tax evasion in the future.

Findings such as these suggest that in order to prevent widespread resistance to decisions and subsequent non-compliance, regulators should aim to protect their reputation as a legitimate authority. One way in which this could be achieved by regulators is to adopt a more responsive enforcement strategy that takes into account the principles underlying procedural justice (Murphy, in press). For example, in using a responsive approach to enforcement, Ayres and Braithwaite argue that persuasion and dialogue should be a regulator's strategy of first choice, because preserving the perception of fairness is important to nurturing voluntary compliance (Ayres & Braithwaite, 1992). They argue that

a cooperative first step will allow a non-compliant individual the opportunity to change their behaviour and adopt a compliant position. If this does not occur, then a swift escalation to sanctions would be required to ensure that both parties understand the serious consequences of continued non-compliance.

Evidence to suggest that such an approach might work effectively on non-compliant taxpayers comes again from examining the situation surrounding the mass marketed schemes issue. In 2002, the Tax Office offered many of the scheme investors the opportunity to settle their scheme-related debts. The Tax Office first acknowledged that many investors had been the victims of bad advice. For those who were eligible to take up the settlement offer, it included abolishing the interest and penalty component of the tax debt (in most cases this halved taxpayers' debts), and gave taxpayers a 2-year interest free period in which to repay the remaining debt. Taxpayers were given two months to decide whether they would take up the offer, after which time, full penalties and interest would be reapplied and further legal action would be taken against non-compliant taxpayers. After four years of active resistance, this strategy resulted in the Tax Office receiving a flood of settlement agreements (a total of 87% of all taxpayers involved agreed to settle).

This is not to say that there is no place for punishment of taxpayers involved in aggressive tax planning. Aggressive planning poses a serious threat to the integrity of a tax system, and as such should be dealt with in a serious manner. However, as indicated in the introduction to this paper, the question of interest here was not whether or not a tax authority should punish a taxpayer involved in tax avoidance, but how they should punish the taxpayer in a fair and just manner. It has been proposed that by using a responsive enforcement strategy that adopts the principles underlying procedural justice theory, regulators may be more likely to prevent widespread resistance towards their decisions, while at the same time nurturing the good will of those with a commitment to compliance.

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