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# Tax Compliance, Self-Assessment and Tax Administration

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The authors first published a commentary on tax compliance, self-assessment and administration in New Zealand in James, S. and Alley, C. (1999) 'Tax compliance, self-assessment and administration in New Zealand - Is the carrot or the stick more appropriate to encourage compliance?' *New Zealand Journal of Taxation Law and Policy*, Vol. 5, No. 1, April, pp. 3-14. The proposals in the article remain relevant. However, further developments in the economic and behavioural approaches to tax compliance and the taxpayer-based studies recently undertaken have added a new dimension to the analysis. The authors have therefore revisited and updated the original proposals.

## **Abstract**

Tax compliance is likely to become even more important with developments such as self-assessment and electronic commerce. This paper re-examines the meaning of tax compliance. It finds that existing definitions are usually too narrow to encompass the topic in full and a wider definition is offered. The paper describes the purpose of tax compliance and the factors that affect the willingness of taxpayers to comply with a tax system. It discusses two different approaches to tax compliance and suggests that caution should be shown in the use of penalties and the emphasis should be on assisting citizens to meet their tax obligations. Fortunately recent developments have seen closer cooperation between tax agencies and academic researchers. A pressing task is the development of an approach that incorporates both the economic and behavioural approaches to tax compliance and a successful strategy for tax compliance must give due weight to all relevant factors and their interaction.

## **Introduction**

It has never been easy to persuade all taxpayers to comply with the requirements of a tax system. Tax compliance is likely to become a more significant aspect of tax policy as most of the old problems remain and new considerations are raised by developments such as self-assessment, the emergence of the global economy and electronic commerce. These factors have policy implications about the way the tax system should be administered. In particular, one risk with self-assessment is the temptation to rely on a harsher enforcement regime. It has been alleged from time to time, for example, that the Internal Revenue Service in the USA has sometimes relied on over-zealous enforcement or unduly punitive methods of securing compliance with their self-assessed income tax system (Payne, 1993). However, there seems to have been signs of fundamental change in the approach of some tax agencies with respect to taxpayers. For example, in the United States, the Internal Revenue Service, long known for its very firm approach to taxpayers, has been considering a rather different stance. In its document *Reinventing Service at the IRS* (Internal Revenue Service, 1997) Vice President Al Gore and Treasury Secretary Robert E. Rubin stated that 'We must have an IRS that is on the taxpayers' side, providing the help they need' but 'We know we have a long way to go'. That report addressed the question 'What if the Internal Revenue Service thought of taxpayers as customers?'

As the primary purpose of taxation is to benefit rather than punish citizens, this would seem to be an appropriate policy. Furthermore, as Montesquieu (1748) put it succinctly, 'the unreasonable severity of the laws obstructs their execution'. No doubt sanctions will always have to exist to support tax administration, but there are important questions as to the extent they are needed and the enthusiasm with which they should be enforced. There are also more positive ways of promoting tax compliance that are more consistent with the role of public spending as a net public benefit.

The purpose of this paper is to re-examine issues of tax compliance in the light of a changing environment for tax administration in New Zealand and, across the world. The first section examines the importance of compliance and some of the effects of non-compliance. In the second section it is suggested that existing definitions of tax compliance are incomplete. In particular it will be argued that non-compliance involves more than tax evasion - the attempt to reduce tax liability by illegal means. Non-compliance also includes some forms of tax avoidance - reducing taxation by legal means. The third section revisits the purpose of taxation - it is a means not an end, and compliance is part of that means - and questions the point of incorporating fear and punishment into a system designed to promote the public good. The fourth section analyses explanations of compliance and the fifth section is a brief diversion into tax policy compliance in New Zealand. The conclusion in the final section is that there are alternative methods of promoting compliance and that it is important to strike the right balance in encouraging voluntary compliance as well as deterring wilful non-compliance.

## **Factors affecting Tax Compliance**

There is no doubt that compliance is a major problem confronting all revenue authorities. For instance, in the USA the Internal Revenue Service has gone to considerable trouble to estimate the amounts of tax revenue, which are not collected under the American system of self-assessment. One measure is the 'net tax gap.' This is the difference between 'true' individual income tax liability and that finally collected on a voluntary basis or by enforcement action (the concept of the 'tax gap' is discussed in the next section). It has been estimated to be between \$US 78.3 to 80.4 billion or 14.2 to 15 per cent of US personal income tax liability in 1992 (Internal Revenue Service, 1996). The majority of this loss consisted of the under-reporting of income, with smaller proportions attributable to the non-filing of returns and overstating tax deductions.

Self-assessment has implications for compliance and a movement towards a greater element of self-assessment has been taking place in countries such as New Zealand (Inland Revenue Department, 1995), the UK (James, 1995) and Australia (Sandford & Wallschutzky, 1994). Under self-assessment it is the responsibility of the taxpayer rather than the revenue authority to calculate the relevant tax liability and to ensure that the requirements regarding payment and so on are met (Barr, James & Prest, 1977).

## **The Concept of Tax Compliance**

The definition of tax compliance in its most simple form is usually cast in terms of the degree to which taxpayers comply with the tax law. However like many such concepts, the meaning of compliance can be seen almost as a continuum of definitions. This ranges from the narrow law enforcement approach, through wider economic definitions and on to even more comprehensive versions relating to taxpayer decisions to conform to the wider objectives of society as reflected in tax policy.

Taking the narrow end of the continuum first, one suggestion is that the degree of non-compliance may be measured in terms of the 'tax gap'. This represents the difference between the actual revenue collected and the amount that would be collected if there were 100 per cent compliance. For instance the New Zealand Inland Revenue Department refers to 'minimising the tax gap between theoretical revenue and actual revenue' (1997, para. 1.2) [italics in the original] but without specifying what 'theoretical revenue' means. There are some variations. For instance, and rather curiously, Brand (1996, p.413) refers to the 'market share' of the Internal Revenue Service in the USA. Markets, of course, usually refer to the commercial transactions between free agents without the need for coercion or problems of compliance. However, what Brand means by market share is 'the amount of the projected total tax base that the IRS actually collects.' (1996, p.414). Andreoni, Erard and Feinstein (1998) include a time dimension to compliance but are still mainly concerned with tax evasion as the central part of the tax gap definition. As they put it: 'A popular indication of the magnitude of evasion is the tax gap - the difference between the federal income taxes households actually owe, and what they report and pay voluntarily on a timely basis.' (p.818). The IRS has two definitions - gross tax gap and the net tax gap mentioned above. The gross tax gap (1996, p.5) is the amount of 'true' tax liability that is paid 'voluntarily' and on time and the net tax gap is this amount less tax paid late or collected by the IRS through enforcement activities. Both the gross and net tax gaps can be subdivided into the three main components (Internal Revenue Service, 1996, p.8) - the non-filing gap, the under-reporting gap, and the underpayment gap. The underreporting gap is in turn made up of three elements - underreported income, overstated offsets and net arithmetical mistakes.

A major concern with such definitions is that they might be taken to indicate a certainty in the measurement of tax compliance that does not exist. Tax law is not always precise. Indeed, although legal definitions are often of the tax gap form, there are sometimes practical difficulties of interpretation. Bergman (1998) suggests that tax compliance 'is what the state assumes is legally owed by taxpayers, but the state and taxpayers do not necessarily share

the same interpretation'. The extent to which taxpayers dispute the meaning of the tax law can depend on a number of things, including their basic willingness to comply with a tax system. The basic concept of the 'tax gap' of non-compliance seems to be inadequate. The 'tax gap' definition and measure are far too simplistic for practical policy purposes since successful tax administration requires taxpayers to cooperate in the operation of a tax system rather than to be forced to carry out every aspect of their tax obligations. Tax law cannot cope with every eventuality (see for example James and Wallschutzky, 1995) and therefore has to be supplemented with supporting provisions. Administrative procedures and decisions as well as appeal arrangements all have a part to play but the tax system cannot work properly without a reasonable degree of willing compliance on the part of taxpayers themselves.

There is the question whether 'compliance' refers to voluntary or compulsory behaviour. If taxpayers 'comply' only because of dire threats or harassment or both, this would not appear to be proper compliance even if 100 per cent of the tax were raised in line with the 'tax gap' concept of non-compliance. Instead, it might be argued that successful tax administration requires taxpayers to comply willingly, without the need for enquiries, obtrusive investigations, reminders or the threat or application of legal or administrative sanctions. A more appropriate definition could therefore include the degree of compliance with tax law and administration, which can be achieved without the actual application of enforcement activity.

This 'voluntary' aspect appears in the definition supplied by Andreoni et al. (1998) above and is important. This recognises a basic difference in terms of compliance between tax paid without direct enforcement activity and tax paid as a result of it.

There is also a difficulty with the idea that there is some fixed tax revenue that would be collected if all taxpayers simply observed 100 per cent obedience to the law. The level of potential tax revenue is determined by the level of economic activity. It is possible that an intrusive tax regime might reduce the willingness of taxpayers to earn more money or engage in commercial activity not only because of the associated tax liability but because that extra liability might involve inconvenient administrative requirements or the risk of a heavy handed official response. This is rather like the 'spite effect' described by Musgrave (1959, p.240). For instance, it might be the case that workers behave differently to changes in wage rates caused by taxes than they do to changes caused by market forces. If taxes were considered to be intrusive or unfair, taxpayers might wish to reduce their tax liability by working less. Even though this will have a cost to themselves that might be outweighed by a feeling of revenge. It is also possible that taxes might be used as an excuse to avoid unwanted overtime or other obligations. It is not known how powerful any spite effects might be but it is clearly possible that, apart from the direct costs of compliance themselves, difficulties in the willingness of taxpayers to comply might affect the revenue potential itself. The 'tax gap' definition of non-compliance might then have been partly satisfied because there is less to collect.

A fuller economic definition of compliance should also take into account other possible economic effects of the tax system and its enforcement. There has been some economic analysis of such possibilities, for example, by Cowell (1985) who considered the case where a worker can choose not just between working in the legal or illegal sectors but how much time to spend in work of any sort as opposed to leisure. It has also been specifically shown that uncertainty in tax audits could affect labour supply (Horowitz & Horowitz, 2000). It seems reasonable to conclude that tax administration could reduce potential tax revenue by discouraging taxable economic activity. Paradoxically, therefore, a severe tax enforcement policy could even claim to have improved tax compliance by the narrow 'tax gap' definition because it would have reduced the amount there was to collect.

Timing issues will also affect the value of the potential revenue available. A taxpayer might eventually pay his or her full liability but if it is paid late it cannot be considered to be full compliance, or worth as much as tax liability paid on time or even before the due date. In economic terms, money in the future is worth less than the same nominal sum of money now. If the Government does not receive tax payments on time it either increases the amount it has to raise elsewhere or reduces the revenue available for public expenditure. Although late payments of tax fit many of the 'tax gap' measures, they do not represent full compliance.

An interesting aspect of the timing issue is where interest is charged on late paid tax. Interest charged at an economic rate would neutralise the problem from the point of view of the revenue, though it may still not fit definitions of compliance. However, in some jurisdictions interest is charged at a higher rate and, particularly when combined with penalties can result in a very high effective rate indeed. The implications with respect to New Zealand will be discussed later in this paper.

As already indicated in the introduction, tax compliance may be seen in terms of tax avoidance and tax evasion. The two activities are usually distinguished in terms of legality, with avoidance referring to legal measures to reduce tax liability and evasion to illegal measures. While some commentators see non-compliance only as an evasion problem, this does not seem to capture the full nature of the problem. Clearly tax evasion is a form of non-compliance. However, if taxpayers go to inordinate lengths to reduce their liability this could hardly be considered 'compliance' either. Such activities might include engaging in artificial transactions to avoid tax, searching out every possible legitimate deduction, using delaying tactics and appeals wherever this might reduce the flow of tax payments and so on. 'Tax exiles' even seem to prefer to emigrate rather than fulfill their obligations as citizens. Even if such activities are within the letter of the law, they are clearly not within the spirit of the law. Compliance might therefore be better defined in terms of complying with the spirit as well as the letter of the law.

Many of the studies of compliance are concerned with intentional non-compliance. There is, however, considerable scope for unintentional non-compliance. Full compliance may require positive actions on the part of the taxpayer to discharge his or her legal duties in full. It may be that taxpayers innocently fail to meet their tax obligations because they fail to complete their tax returns correctly or are unaware of, or misunderstand, various provisions of the tax system, or for similar reasons. Attempts by different tax authorities to improve tax administration in this respect have often found the problem of assisting taxpayers more difficult than might at first appear (see, for example, James et. al., 1987 and James, Sawyer & Wallschutzky, 1998). A further complication is that some taxes might actually have been imposed in the hope that they would be avoided. For instance, it has been argued that higher taxes on alcoholic drinks (Cook & Moore, 1994; Irving & Sims, 1993) and tobacco (Viscusi, 1994) would reduce the consumption of those products and this would lead to improvements in the health of the population. Any such changes in behaviour would constitute tax avoidance but it would be in the spirit as well as the letter of the law. There have also been developments in other forms of "corrective taxation" referred to as environmental taxes (Smith, 1992; Symonds, Proops & Gay, 1994; Cordes, Nicholson & Sammartino, 1990), or "green taxes" (Oates, 1995). The 'tax gap' method of viewing compliance is clearly inapplicable in such cases. Furthermore, although the alcohol and tobacco examples are very clear, the tax system is used by governments as an instrument of policy in all sorts of ways - encouraging some activities and discouraging others. Compliance in this context would appear to indicate compliance with government policy in the wider sense, rather than just compliance with tax law.

The tax avoidance/evasion issue may be important with respect to tax compliance for another reason. The two activities are defined the way they are with an implicit assumption



that it is always possible to distinguish between the two. Of course, this is not always true. Seldon and others (1979) coined the term tax 'avoidance' to denote those areas of the tax system where the law is unclear. This aspect has been discussed in a New Zealand context by Sawyer (1996). To the extent that there is such uncertainty in a tax system, it follows that tax compliance should follow the spirit of the law. It would therefore seem that compliance is a much wider issue than simply the gap between actual revenue and some concept of 100 per cent of revenue collected. A final definition of compliance might therefore be: the willingness of individuals and other taxable entities to act in accordance with the spirit as well as the letter of tax law and administration without the application of enforcement activity. There is no measure of such a definition that is both simple and accurate. However, this definition does indicate the main features, which should be considered in judging the compliance of taxpayers with the tax system.

### **The Purpose of Taxation and Tax Compliance**

A further dimension to this topic is the purpose of tax compliance. There is no real alternative to taxation to pay for the high levels of public expenditure that modern economies demand. It is possible to charge for a few government activities. However, the possibilities are very limited and, if such activities are commercially viable, it could be argued that they can be left to private sector. Governments can also raise resources by borrowing, but the scope is limited and the interest and the principal of these funds must eventually be repaid by revenue generated from taxation.

Taxation does not exist in some sort of economic, social and political vacuum. Taxation is a means not an end. It is therefore an advantage if compliance can be achieved willingly and on a genuinely voluntary basis so far as that is possible. It detracts from the whole purpose of raising taxation for the public benefit if compliance can only be achieved under the threat of severe penalties and enforcement action. If the amount of suffering involved in raising the revenue is greater than the benefits from the associated public spending then something is clearly wrong.

Yet it appears that some revenue authorities, at least on some occasions, have followed the policy that the most important objective is maximum tax compliance, regardless of other considerations. An early example comes from the work on differences in compliance behaviour of revenue authorities by Schmolders (1970). In 1970 he used survey evidence from five European countries to examine different tax regimes. In the case of Germany he found that tax compliance was satisfactory in the narrow 'tax gap' sense but this involved other disadvantages as a result of a high degree of 'confrontation', which led to general tax resistance.

It has also been alleged that the Internal Revenue Service (IRS) in the USA has used a heavy hand regarding compliance and some examples are given by Payne (1993). In fairness, the IRS has also recognised the gains from voluntary compliance, for example, with its mission based document Compliance 2000 and has made serious attempts to find other ways to promote compliance (Internal Revenue Service, 2000).

### **Explanations of Tax Compliance**

The following table summarises some of the points of the two different approaches to tax compliance.

**Table 1**  
**Approaches to Tax Compliance**

<b>Tax Compliance</b>	<b>First Approach</b>	<b>Second Approach</b>
Concept of:	Tax Gap 100% compliance less actual revenue.	Voluntary Willingness to act in accordance with the spirit as well as the letter of the law.
Definition	Narrower	Wider
Tax compliance	Economic rationality	Behavioural co-operation
Exemplified by:	Trade off: <ol style="list-style-type: none"> <li>1. Expected benefits of evading.</li> <li>2. Risk of detection and application of penalties.</li> <li>3. Maximise personal wealth</li> </ol>	Individuals are not simply independent, selfish utility maximisers. They interact according to differing attitudes, beliefs, norms and roles. Success depends on co-operation.
Issues of:	Efficiency in resource allocation	Equity, fairness and incidence
Taxpayer seen as:	Selfish calculator of pecuniary gains and losses	"Good citizen"
Can be termed the:	Economic approach	Behavioural approach

Revenue services and a variety of academic disciplines suggest there are two basic approaches to the problem of compliance. One is to analyse compliance in terms of economic decisions based on the likely economic incentives and costs of complying or not complying. This is based on a relatively narrow concept of economic rationality and developed using economic analysis. The other has been to examine the effects of other factors on compliance decisions, particularly as they relate to taxpayer behaviour and sometimes tax agency behaviour. This is concerned with wider behavioural issues and draws heavily on concepts and research from disciplines such as psychology and sociology.

It could be argued that these two approaches link in with the narrow and wider concepts of tax compliance respectively. If tax compliance is seen primarily as a problem of evasion, law enforcement seems to be the main issue. Here, the economic approach has particular relevance as it is very suitable for examining the trade-offs between the expected benefits of evading tax with the risk of detection and the application of penalties. If compliance is more widely defined, involving taxpayers' decisions to avoid tax legitimately or the diligence with which they discharge their obligations, the behavioural approach seems to be particularly relevant.



The economic approach is based on a narrow view of economic rationality under which it is assumed that individuals will wish to maximise their personal income and wealth. They will not comply with the tax system unless the benefits of doing so exceed the costs of not doing so in the form of fines and penalties. It has been narrowly defined as a straightforward 'calculus of pleasure and pain' in pecuniary terms (Jevons, 1871). As Bernasconi (1998) put it, 'evading tax is like gambling'. There are gains to be made if the evasion is successful and costs in terms of penalties if it is not. It is just a matter of adding up the expected utility in financial terms of every decision to comply or not to comply with the requirements of the tax system.

This narrow economic view assumes, implicitly or otherwise, that individuals are immoral and operate in some sort of social vacuum. Tax evasion is then explained simply in terms of factors such as the level of tax rates, the probability of being caught evading, the penalties that would be imposed and the degree of risk aversion. An early model on these lines was published by Allingham and Sandmo (1972). Since that time, that approach has dominated the academic literature in economics and many refinements of a technical nature have been made. This has led to research on a whole series of different aspects of economic compliance decisions. Polinsky and Shavell (2000) summarise some of the work on the economic theory of law enforcement and Andreoni et al. (1998) with specific reference to tax compliance. The basic questions addressed, include the level of resources that should be devoted to enforcement, the relative effectiveness of a higher level of auditing or more severe penalties, and the form the penalties should take.

Uncertainty is also a factor in these calculations (for example, Alm, Jackson & McKee, 1992) and can, of course, extend to other participants - such as risk averse tax collectors (Tzur & Kraizberg, 1995). This leads on to the costs of concealment (Cremer & Gahvari, 1994). The chances of getting caught are also obviously important so the probability of being detected comes into it (Fischer, Wartick & Mark, 1992) as do the deterrent effects of auditing non-compliance (Dubin & Wilde, 1989) and the relative effects of different audit schemes (Alm, Bahl & Murray, 1993; Collins & Plumlee, 1991). Tax agents are also important, as are the penalties applying to them (Cuccia, 1994). A further refinement is the willingness of the tax authority to renegotiate penalties (Cho, Linn & Nakibullah, 1996). This 'cost-benefit' approach can be extended to the point that compliance can be improved with pecuniary rewards to taxpayers (Falkinger & Walther, 1991).

Turning to administration, the economic approach provides the theoretical underpinning for the huge debate about the effectiveness of auditing and the form it should take. There has been a considerable amount of work examining the effect of detection probability on taxpayer compliance. A survey of some of the literature was published in 1992 by Fischer et al. (1992), and the work done then and since has covered many possible angles. For example, Linster (1997) examined the possibility that different groups of taxpayers had different degrees of risk aversion and auditing policy should be designed to take this into account.

There is also little doubt that, with respect to auditing policies, both tax agencies and taxpayers 'interact strategically to achieve their respective ends'. It is not surprising, that experimental evidence, for example by Alm, Cronshaw & McKee (1993) has indicated quite strongly that the strategic selection of tax returns by a revenue service for audit is generally more effective than a random selection in detecting errors.

The form the penalties should take has also been raised. Imprisonment is not only costly but prevents the guilty party from contributing to economic output - a double loss - and might therefore, in general terms, be inferior to fines. Possibly the deterrent effect of imprisonment might have a beneficial behavioural effect on others tempted to cheat, but it is a costly option.

There are various aspects of tax administration that might be investigated further, such as mistakes in enforcement activity by revenue agencies. There are obviously two sorts – one where a taxpayer is found liable to tax where no genuine liability exists and the opposite situation where a taxpayer with a genuine tax liability is mistakenly not found liable. Once more, there is an economic trade-off. Mistakes have costs, but so does devoting more resources to reducing the risk of their occurring. More generally, there are choices to be made between operating a tax system at a high level of accuracy but at greater administrative cost and one that is more rough and ready but cheaper to operate. Such issues have been raised, for example, with respect to self-assessment (Barr et al., 1977; James, 1995).

This approach based on economic rationality, narrowly defined, has limitations and has been subject to many challenges, such as those of Etzioni (1988) and Mansbridge (1990). Furthermore, in the specific case of compliance, some of the conclusions of the economic approach do not seem to be consistent with taxpayer behaviour. Indeed, according to Smith and Kinsey (1987), the analysis predicts that most people evade tax, which does not seem to be generally true. In fact, there is empirical evidence that many taxpayers are inherently honest and will disclose their financial affairs accurately regardless of the incentive to cheat (Erard & Feinstein, 1994b; Gordon, 1989). Indeed, the level of tax compliance appears to be generally quite high in most countries, see for example, Graetz and Wilde (1985) and Skinner and Slemrod (1985). Furthermore, experimental evidence (Baldry, 1986) suggests that some people never evade, even when the risks are favourable to the taxpayer. In addition, those following the economic approach have not normally taken account of equity issues, but there is evidence that tax evasion is adversely affected, for example, by the perceived inequity between the tax paid and public spending benefits (Wallschutzky, 1984) and by the perceived tax evasion by other taxpayers (Porcano, 1988). However, an approach that treats human beings as little more than isolated experimental rats in a cage may not provide a full explanation of tax compliance behaviour.

Despite these limitations and the intuitive appeal of the wider behavioural approach, the economic approach still has a place in tax compliance as it is reasonable to assume that, to a greater or lesser degree, financial considerations do influence taxpayer behaviour. For corporations, it might be argued that pecuniary considerations and the maximisation of shareholder wealth are likely to take precedence over other possible corporate goals (see, for example, Brealey & Myers, 2000, ch. 2), thus making the economic approach even more appropriate.

In contrast, the behavioural approach draws on other academic disciplines in suggesting that there might be additional factors that are important in motivating taxpayers regarding compliance. Sociological studies, for example, have identified a number of possible explanatory factors, such as social support, social influence, attitudes and certain background characteristics such as age, gender, race and culture (see, for example, Meier & Johnson, 1977 and Jackson and Milliron, 1986). Psychology has reinforced this approach and even produced the separate branch of 'fiscal psychology.' (Schmölders, 1970; Lewis, 1982). Attitudes towards the state and revenue authorities are important, as are perceptions of equity. Individuals' roles in society and accepted norms of behaviour are also important. The essential thrust of these contributions from sociology and psychology are that individuals are not simply independent, selfish, utility maximisers (though this may be partly true). They also inter-act with other human beings according to differing attitudes, beliefs, norms and roles. The result is that tax compliance may be viewed, as Schmolders (1970, p.305) suggests, as a 'behavioural problem' and that 'the success of an income tax depends on co-operation.'

The importance of equity and fairness has been a theme frequently examined, for example, by Bordignon (1993) and Cowell (1992). Other background factors have also been studied such as cultural factors (Coleman & Freeman, 1997) and the implications of different political systems (Pommerehne, Hart & Frey, 1994). Direct psychological factors, including taxpayers' consciences and feelings of guilt and shame, have also been considered (see, for example, Hasseldine & Kaplan, 1992; Erard and Feinstein, 1994a). In keeping with this approach, others such as Hite (1989) have suggested more positive help for taxpayers. There are many different possible methods of achieving this - such as incorporating specific messages which have been shown might increase compliance for targeted groups of taxpayers (Hite, 1997) or the use of television to change taxpayers' attitudes towards fairness and compliance (Roberts, 1994). The truth, of course, is likely to be found in some combination of these approaches. Some people might be amoral and totally materially driven in which case some incentives and penalties might be usefully applied. However, the majority of people seem to exhibit at least some evidence that they respond to social and other values and a successful tax compliance policy will take account of these. The danger is that the unnecessary application of penalties might provoke taxpayer resistance and undermine compliance behaviour on the part of otherwise responsible citizens. This would seem to be the basic question for tax compliance policy in an era of self-assessment.

The dependent variable of interest in tax compliance is actual tax behaviour but often the process of negotiating access to real taxpayers is difficult, as tax agencies must maintain strict confidentiality rules. However confidentiality rules do not mean that experimental research in taxation cannot proceed and there are a handful of interesting examples that reflect the closer co-operation that tax agencies are having with academic researchers.

The Minnesota Department of Revenue together with a team of external experts (see Blumenthal, Christian & Slemrod, 2001) conducted an experiment in 1995 using alternative strategies to improve voluntary compliance with the state income tax. These strategies included: increased auditing of returns with prior notice to taxpayers, enhanced services to taxpayers, information messages in letters sent to taxpayers, and a revised simple tax return. Through the use of a strong research design (e.g. use of control groups, between-subjects design), and the use of actual taxpayers (not a convenience sample of adults or students), statistical analyses were used to estimate the effects of the alternative strategies on reported taxes.

In Australia, social science researchers at the Centre for Tax System Integrity at The Australian National University, Canberra are working on a number of projects with experimental designs. The Australian Taxation Office has commissioned a research team from the Australian Taxation Studies Program (ATAX) to conduct a national study of tax compliance costs. Although looking at the topic from the point of view of tax compliance costs rather than defining the concept of tax compliance Tran-Nam, Evans, Walpole and Ritchie (2000) provide the conceptual framework for measuring tax compliance costs in their ATAX study by the following definition. Taxpayer compliance costs are the social compliance costs less the cash flow and tax deductibility benefits to taxpayers. Social compliance costs are the direct monetary outgoings incurred by taxpayers plus imputed costs of time and resources spent by taxpayers. They also "note that cash flow and tax deductibility benefits to taxpayers reduce tax revenue and can thus be regarded as costs to tax authorities. The loss in tax revenue reduces government expenditure or results in higher taxes or borrowing and will thus affect taxpayers and non-taxpayers alike." They accepted that this framework does not embrace all aspects involved. "For example, to be comprehensive, the model would need to take into account what have been referred to as psychic costs (stress, anxiety, frustration, etc. experienced by taxpayers, especially the elderly) in complying with their tax obligations. To date, no studies have managed to successfully incorporate psychic costs, although research in this area is taking place (Woellner, 1998).

James, Hite, Hasseldine and Toumi are currently conducting an experiment with actual U.K. taxpayers. In the U.K., sole proprietors with turnovers of £15,000 or less can choose to fill in an 'easy' return by filling in their total turnover in one box, their total deductible expenditures in a second box, and the resulting subtraction (box 1 – box 2) is taxable income. However, in the £14-15,000 bracket, there are more taxpayers than would otherwise be expected. Further when this group are audited, they are found to be associated with large audit adjustments. That is, dishonest traders are apparently intentionally lowering their turnovers in order to reduce their compliance costs when it comes time to file their tax returns. The messages being tested with a sample of 9,000 taxpayers include: a 'we're here to help' message from the Inland Revenue, a good citizen message, a message of increased sanctions (e.g. audits and penalties), and finally one group has been informed that they have been pre-selected for audit (prior to them filling in their returns).

### **Tax Compliance Policy in New Zealand**

Self-assessment tends to be associated with a system of penalties for those who fail to assess their own liability and to pay tax as required. In the UK a new system of penalties was introduced along with the recent introduction of self-assessment from the tax year 1996/97. In New Zealand new compliance and penalty rules became law in 1996 partly to take account of the 'modernisation of tax administration' and 'an increasing responsibility placed on taxpayers to assess their own liability.' (Inland Revenue Department, 1996, Oct, p.7). They came into effect in 1997. As indicated above, there is the risk that an excessively harsh regime could be counterproductive in securing the compliance of some taxpayers. There has been an important debate between tax professionals and the Inland Revenue Department (IRD) in the Accountants Journal and other forums about allegations of the IRD's apparently extremely tough and inconsistent use of the new penalty provisions. Penalties are heavier than they were and a wider variety of types of conduct by taxpayers will cause a penalty to be imposed. There is, however, evidence that the Inland Revenue Department is aware of the dangers of appearing to be too harsh. For example it acknowledged that there had been a feeling that it has been taking a 'hard line' approach with respect to the shortfall penalty regime (Inland Revenue Department, 1998) and is responding to those concerns.

There have also been moves to improve the position for at least some taxpayers. For instance, one way of clarifying the law is to operate a system of tax rulings (Sandler, 1994). In New Zealand a system of binding rulings was introduced in April 1995 and this has covered an increasing range of circumstances (Hill, Crawford & Shewan, 1998; Sawyer, 1997a; Sawyer, 1997b). Furthermore there are new tax disputes resolution procedures, which came into effect in October 1996 (Inland Revenue Department, 1996, Aug.) and have been examined by Sawyer (1996).

Wallschutzky (1993) pointed out that traditionally most of the attention paid to tax compliance by revenue authorities and others has been devoted to why some taxpayers do not comply rather than why others do so. It might easily be argued the other way round. The norm is usually to comply rather than not to comply and for a tax system to be effective it must have the willing co-operation of a majority of taxpayers. It follows that there may be greater gains in assisting compliant taxpayers meet their fiscal obligations than in spending more resources in pursuing the minority of noncompliers. Many taxpayers might be willing to comply in full but are unable to do so because they are not aware of, or do not understand, the extent of their obligations. Even if they did, they may not be able to comply for other reasons. Additional resources devoted to assisting such taxpayers, for example, by improving the flow and quality of information or educating them into becoming more responsible citizens, might yield greater revenue than if it were spent on additional enforcement activities. In New Zealand in September 1998 there were television campaigns to encourage more responsible behaviour with respect to safe driving, alcohol and tobacco. There may be a role for further activity of this kind with respect to taxation.



It has been argued that taxpayers might need support at different levels (James, Lewis & Allison, 1987). New Zealand seems to do well here. Apart from the new binding rulings, there is a useful range of explanatory leaflets, which are easily accessible to taxpayers and a useful site on the World Wide Web (Inland Revenue Department [online]).

One other way forward is to simplify the tax law. Considerable progress has been made in this direction in New Zealand involving a rewrite of the Income Tax Act 1976 (as amended) and the Inland Revenue Department Act 1974 (as amended) and other fiscal legislation in due course. In examining the work done here, Richardson and Sawyer (1998) found that it had been successful in improving readability and comprehensibility as measured by the Flesh Index. Such moves have also been made in other countries but tax simplification is not a simple process in general (James, Sawyer & Wallschutzky, 1998) nor is simplifying tax law in particular (Prebble, 1996). A complicated tax system generates complicated tax laws, however simply they are written and other important factors have to be taken into account in order to achieve any lasting improvement in this respect.

### **Conclusions**

Tax compliance is a complex subject with broad implications. There are two main approaches the economic and the behavioural, used to encourage taxpayers to comply with the taxation system. The economic approach, usually confined to penalties, may be necessary to enforce compliance by those taxpayers who would otherwise refuse to discharge their obligations as citizens. However, there are dangers in using such an approach more widely. It is suggested that taxation is a means to an end and an unnecessarily harsh enforcement regime, such as that which appears to have been used in some countries, detracts from the whole exercise of raising money for the public benefit. Furthermore, such harshness can reduce the willingness of otherwise responsible citizens to comply with what may then be perceived as an unjust system. There is a clear need to strike the right balance in encouraging voluntary compliance as well as deterring wilful non-compliance. Despite the limitations of its approach and the intuitive appeal of the wider behavioural approach, the economic approach still has a place in tax compliance as it is reasonable to assume that, to a greater or lesser degree, financial considerations do influence taxpayer behaviour, for example, the maximisation of shareholder wealth in corporations.

However, both approaches add to the explanatory behaviour and should be amalgamated into a single policy for compliance. The question is how and to what extent? It has already been pointed out that tax compliance should be consistent with tax policy generally.

There is still much to learn about taxpayer motivation and how this is influenced by different tax compliance policies. As the taxpaying environment is changing, research on taxpayer behaviour will be ongoing. A valuable development is the increasing agreement of tax collecting organisations to make available their data bases and to allow rigorous research on taxpayer returns and details. This will allow research that should lead to a greater understanding of behavioural relationships involved in tax compliance. However a more immediate task is the development of an approach that incorporates both the economic and behavioural approaches to tax compliance. No doubt taxpayers are influenced by both economic and other motives, and a successful strategy for tax compliance must give due weight to all relevant factors and their interaction. Self-assessment increases the risk that a revenue service might resort too readily to a penalty driven compliance policy. With the introduction of self-assessment, the revolution of technology and the emergence of the global environment this is a trap into which no revenue collecting bureaucracy should be allowed to fall.

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