

1 Introduction

Is tax evasion a hot topic in economics and social sciences? A search for citations in the 'Web of Science' (January 2006; SSCI, SCI and A&HCI) yielded confirming results: from the beginning of documentation in 1945 to 1980, 75 citations were produced when the key words 'tax', 'taxes', 'taxation' and 'evasion' or 'compliance' were entered. In the following decade, 1981 to 1990, the number increased to 141, and reached 372 in the years spanning 1991 to 2000. Even faster growth is seen from 2001 to 2005, with 278 new publications registered. In 1986, Freiberg wrote that little is known about the extent of tax evasion, and even less is known about the criteria for enforcement of the law, or why some cases are selected for prosecution and others are not. Andreoni, Erard and Feinstein (1998) observed that from the beginning of the 1980s until the completion of their tax compliance review in the late 1990s there was an increasing tide of research on tax compliance. This tide has continued to grow into the present. As most of the publications are in the field of economics, an overwhelming majority refers to the influential models of tax evasion developed by Allingham and Sandmo (1972) and Srinivasan (1973) on the basis of Becker's 1968 theory of crime, which is tested by econometric modelling and analyses of empirical data, and further refined by adding specific variables which are assumed to influence tax compliance (cf. Franzoni, 2000).

The terms 'psychology' or 'psychological' appear in only 10% of the titles and abstracts of publications, with little variation over the years: from 1981–1990, 1991–2000 and 2001–2005, the respective percentages are 12%, 9% and 11%. From the beginning of registration (1945) to 1980, the term 'psychology' appeared in only 1% of the publications. Clearly, the field is dominated by economics. Nevertheless, the increase of publications relating to psychological aspects of taxes, from 1 to 17, 33, and 32 publications in the periods from 1945 to 2005, looks promising.

Niemirowski, Baldwin and Wearing (2001) presented a historical overview of thirty years of tax compliance research in economics and social sciences, beginning with its development in the late 1950s with the early

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work of Schmölders (1959). The overview centred on attitudes and social norms in the 1970s (e.g., Vogel, 1974), and included knowledge as a determinant of compliance (e.g., Eriksen and Fallan, 1996; Wärneryd and Walerud, 1982). Additionally, Niemirowski and colleagues covered the analyses of justice perceptions and tax ethics (e.g., Song and Yarbrough, 1978; Spicer and Lundstedt, 1976), the analyses of anomalies in compliance decisions (e.g., Schepanski and Shearer, 1995) and finally, the study of cooperative interaction between tax authorities and taxpayers (e.g., V. Braithwaite, 2003b). The accumulated volume of knowledge is impressive. Indeed, by the late 1970s, the US Internal Revenue Service (IRS) had already identified more than sixty factors likely to determine taxpayer behaviour. Yet, important recent additions like gain and loss framing of tax dues and withholding phenomena were not included (IRS, 1978, quoted in Chang and Schultz, 1990). The field has seen several literature reviews (e.g., Andreoni, Erard and Feinstein, 1998; Brandstätter, 1994; Franzoni, 2000; Hasseldine and Bebbington, 1991; Hasseldine and Li, 1999; Jackson and Milliron, 1986; James and Alley, 2002; Lewis, 1982; Milliron and Toy, 1988; Richardson and Sawyer, 2001; Slemrod, Blumenthal and Christian, 2001; Torgler, 2002; Webley et al., 1991; Weigel, Hessing and Elffers, 1987), as well as collections of research in taxation such as the annual publication 'Advances in Taxation', edited by Thomas M. Porcano, and, since 2004, Suzanne Luttman, or special journal issues (e.g., Journal of Economic Psychology, 1992, edited by Paul Webley and Dick J. Hessing). This accumulated knowledge provides insight into taxpaying behaviour and is of practical relevance for fiscal policy (cf. OECD, 2004). However, research has yet to be integrated into a comprehensive model of taxpayer behaviour. Thus, the fast-growing evidence on tax behaviour and the still widely neglected psychological determinants of tax behaviour in economic models call for a review and for a model integrating the most recent findings in the social sciences.

This volume provides an overview of studies on income tax behaviour as related to psychological aspects and keeps purely economic approaches on the margin. It aims to summarise and integrate findings of tax research and present conclusions that are both scientifically cutting-edge and practically applicable. Tax behaviour has been investigated from a political perspective, mainly focusing on tax law complexity and shadow economy, and from an economic perspective, with the focus on rational decision-making and the impact of tax audits, fines, tax rates and income on compliance. Tax behaviour researched from a behavioural economic and economic-psychological slant has focused on various attitudinal variables, norms and fairness and decision anomalies. Taking all of this



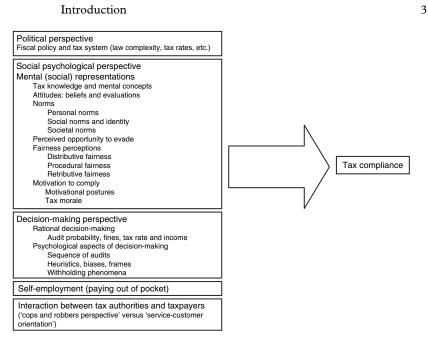


Figure 1: Classification of determinants of tax compliance

into account, the present work classifies this research into two main thematic fields: social representations of taxation and decisions to comply. Two additional sections focus on the specificity of tax behaviour of the self-employed and entrepreneurs, and on the interaction between taxpayers and tax authorities. The latter topic has predominantly been studied from a social psychological perspective. Figure 1 displays the various perspectives and variables under consideration.

To help guide the reader through this material, the following maps the course of this book: before summarising research on social representations, decision processes, self-employment and tax compliance, and interaction dynamics, first, the complexity of tax laws is discussed. Second, statistics on the shadow economy in general, and tax non-compliance in particular, are presented. Third, tax compliance and evasion are defined. In the section on social representations of taxes, first, research on subjective tax knowledge and subjective concepts of taxation is presented; second, research on attitudes towards tax non-compliance is summarised; third, norms are addressed; and fourth, opportunities of non-compliance are addressed; fifth, fairness and justice considerations are considered; sixth, motivation to comply and tax morale are discussed. In the section on decision-making, rational decisions and decision anomalies



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are presented. In the remainder, evidence on the tax compliance of selfemployed taxpayers and entrepreneurs of small or medium businesses is presented. The final section is dedicated to models of cooperation between taxpayers and tax authorities. The volume ends with a reflection on the difficulty of assessing tax behaviour and advantages and disadvantages of widely used research methods and a summary of presented research. In the last chapter, a model is proposed to integrate research findings as well as for serving as a base to develop interaction strategies with taxpayers. The model is based on tax authorities' perception of taxpayers as 'robbers' or 'clients' and the taxpayers' compliance reactions. Whereas a 'cops and robbers' approach is assumed to evoke mistrust and non-cooperation, a 'service and client' approach is assumed to excite cooperation and voluntary compliance. In a climate of distrust, taxpayers are assumed to deliberately take decisions to optimise their own profit. They are assumed to consider whether it pays to evade, given a certain audit probability and fine in case of detected evasion, or whether it is too risky not to comply. In a climate of trust, taxpayers develop favourable representations of taxation and feel less social distance to tax authorities; thus, voluntary compliance is likely to result. In the former case compliance can be enforced if the state has the power to control tax behaviour and fine evasion; in the latter case compliance is the result of spontaneous cooperation.



2 Tax law, the shadow economy and tax non-compliance

2.1 Complexity of tax law

Tax laws are not always clear. As Slemrod and colleagues put it, 'although one can assert that legality is the dividing line between evasion and avoidance, in practice the line is blurry; sometimes the law itself is unclear, sometimes it is clear but not known to the taxpayer, sometimes the law is clear but the administration effectively ignores a particular transaction or activity' (Slemrod, Blumenthal and Christian, 2001, p. 459).

The concern of legality grows in parallel with the increasing globalisation of business, the increasing complexity of business structures, the nature of financing and transactions and tax flight by establishing businesses off shore, tax havens and money laundering (Owens and Hamilton, 2004). Bartelsman and Beetsma (2003) and Yaniv (1990) present suggestive evidence of income shifting in response to differences in corporate tax rates for a large selection of OECD countries. Modern organised non-compliant businesses act within the law, exploiting the law's shortcomings and loopholes. In Cyprus alone, an estimated 37,000 companies have been established using the advantages of a tax haven, and the number is increasing steadily (Courakis, 2001). Businesses take advantage of loopholes in the law and find more sophisticated ways to reduce tax payments when new regulations and laws are established in response to aggressive avoidance. Businesses also respond symmetrically to tax changes, moving into the underground economy if taxes increase, and out when they decrease (Christopoulos, 2003). In addition to businesses, individuals are also 'tax savvy' and avoid paying more if they can do so legally (Barber and Odean, 2004), or make their creative tax designs sound legal to tax authorities. Rawlings (2004) reports an event which demonstrates how difficult it is to decide what is legal behaviour corresponding to 'the letter of the law', although it is clear what behaviour would have been in line with 'the spirit of the law':

In 1999, the Federal Court of Australia . . . was told of a family who had not filed a tax return for 20 years, but had \$A 13 million on term deposit with a Swiss bank managed

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by trustees in Vanuatu. The two applicants in this case, Doreen and Barry Beazley, had in the mid-1970s sold a successful business in New Zealand for an undisclosed sum and placed the proceeds in what was then the Anglo-French Condominium of the New Hebrides. They did not move to the New Hebrides with their funds, but relocated to Australia ... Between 1989/90 and 1995/96, these investments generated \$A 4,322,968, which was channelled through Vanuatu managed trusts, offshore corporations, captive insurance companies and debentures. (p. 325)

On the basis of documents seized by the Australian National Crime Authority, it was alleged that Mr and Ms Beazley had each failed to declare income of \$A 1,080,742 between 1989 and 1996. However, the Beazleys claimed that these funds were not income, but the progressive repayment and receipt of 'loans' to and from Vanuatu. To meet their day-to-day expenses the family used Bank of Hawai'i credit cards with entities in Vanuatu paying off the resulting debts. They affirmed that these arrangements were part of 'a sophisticated but lawful taxation structure'. Even though the court found that the documents suggested 'a guilty mind', it conceded that the structure might be 'entirely legal' (ibid., p. 325).

In their collection of experiences and innovations in taxation in various countries, Owens and Hamilton (2004) state that in OECD countries one of the major problems in tax administration is understanding what has to be administered, namely the tax laws and how to interpret them. An impressive example can be found in the Australian legislation. The quote below is an uncut selection from the Australian GST Legislation (http://law.ato.gov.au/pdf/ps05_024.pdf; retrieved 7 February 2007). Plain English or clarity are very much lacking. In fact, it verges on the ridiculous and was awarded The Plain English Campaign's 'Golden Bull' Award (see http://www.plainenglish.co.uk/bull05.htm; retrieved 7 February 2007):

Australian Taxations Office for its Goods and Services legislation:

"For the purposes of making a declaration under this Subdivision, the Commissioner may:

- a) treat a particular event that actually happened as not having happened; and
- b) treat a particular event that did not actually happen as having happened and, if appropriate, treat the event as:
 - i) having happened at a particular time; and
 - ii) having involved particular action by a particular entity; and
- c) treat a particular event that actually happened as:
 - i) having happened at a time different from the time it actually happened; or
 - ii) having involved particular action by a particular entity (whether or not the event actually involved any action by that entity)."

A half-century ago, in 1959, Schmölders tested politicians in the German parliament and members of its finance committee on their economic knowledge and found poor understanding of fiscal policy. Tax authorities



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face the problem of the complexities of public finance and the law, as well as ambiguities in interpreting and executing it. Another trend shows that expert tax lawyers are increasingly specialising in particular domains as the complexity renders it impossible to be an expert in general tax law. Tax practitioners investigated in Australia claimed that maintaining an appropriate level of professional competence by ongoing development of their knowledge and skills is a main problem with regard to correctly filing income tax (Marshall, Armstrong and Smith, 1998). Tax laws have become so intricate that even experts, such as accountants, lawyers and tax officers, have difficulty interpreting many of the law's provisions.

Complex tax law is even more difficult to understand for ordinary taxpayers. In 1994, Moser undertook a linguistic analysis of tax laws and identified several problems that make it difficult for ordinary taxpayers to understand the law. Examples of unnecessary complexity are the high level of abstraction in the language, long and complex sentences, use of abbreviations, and reference to experts rather than to ordinary readers. Lewis (1982) reports that the necessary education to understand tax laws is unreasonably high. According to a formula to assess reading age necessary to comprehend the laws, which is based on length of sentences, complexity of words, etc., the British tax law required, at the time of analysis, thirteen years of school education, while the average citizen had nine years of schooling. The US tax law required twelve and a half years, and the Australian seventeen years. Reading and understanding of a 'quality' journal requires less school education. Complexity of tax laws and trends of increasing complexity in the past fifty years are well illustrated in a USA tax foundation graph depicting the increasing number of words used in the US IRS Code from 1955 to 2000 (see figure 2).

In response to this increasing complexity, many countries have endeavoured to simplify the law, although without much success. For instance, New Zealand's tax law was set into plain English, but still faces the same administrative and compliance problems as before the attempt to make it simpler. 'And if the law cannot be made simple, then it is inevitably going to be difficult to understand and administer,' conclude Owens and Hamilton (2004, p. 350), quoting a review of the simplification efforts in New Zealand (www.businesscompliance.govt.nz/reports/final/final-11.html):

From 1989 to 2001, eleven tax simplification/compliance cost reduction policy documents have been published. Eight of these have been released in the last five years. Despite their relative frequency, and their effort to simplify various taxes and processes, the initiatives have had little impact on the volume of tax regulation, its complexity, and the compliance loading on business taxpayers ... Businesses considered taxation their most significant business compliance cost ... Individuals expressed their anger, frustration, confusion, and alienation about

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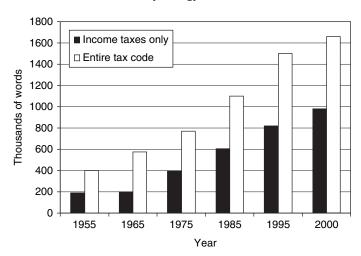


Figure 2: Growth in number of words in the US IRS Code from 1955 to 2000 (adopted from www.taxfoundation.org/compliancetestimony.html; quoted in Owens and Hamilton, 2004, p. 349)

their attempts to meet their tax commitments ... There was a great deal of support for the basic tax system itself, but very high levels of frustration in the way it was implemented. Business people told us that the complexity of the law made compliance difficult and very time consuming. (p. 351)

Experiences in Australia were similar. The Tax Law Improvement Project aimed at rewriting the law into plain English. And while a readability test on Australia's simpler Tax Act showed some improvement, the level of readability remained much too high for the general public, as it required a university education to understand it. Also, the length of the text had increased: eleven lines of one key section were increased to five paragraphs in the new legislation.

'I hold in my hand 1,379 pages of tax simplification,' said USA congressman Delbert L. Latta (*US News and World Report*, 23 December 1985), satirising endeavours to reduce tax complexity on the part of tax administrators and politicians. In Australia, the *Sydney Morning Herald* (9–10 July 2005) published a memorable report about many innovations leading to no substantial changes:

Taxes giveth as GST taketh away

Ross Gittins

Gittins on Saturday

Everyone who's socially aware knows the introduction of the goods and services tax – as it happens, exactly five years ago last week – made the tax system a lot more regressive.



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Except that everyone is wrong.

Associate Professor Neil Warren of Atax at the University of NSW and Professor Ann Harding and Rachel Lloyd of Natsem at the University of Canberra have just produced a study of "GST and the changing incidence of Australian taxes", which reaches some surprising conclusions. It's published in the eJournal of Tax Research

A "progressive" tax is one that takes a progressively bigger proportion of people's incomes as incomes rise. A "regressive" tax is the opposite: it takes a progressively smaller proportion of people's incomes as incomes rise.

The popular conviction that the GST caused the tax system to become more unfair is based on a simple logic: the GST is an indirect tax, all indirect taxes are regressive, therefore the system has become more regressive.

But that logic was always too simple. For a start, the GST was replacing various old indirect taxes that were regressive also. For another thing, the decision not to tax food made the GST a lot less regressive than it could have been. For a third, there were many other changes in the tax reform package – including increases in welfare benefits and huge cuts in income tax – so what effect did they have?

Clearly, the effect of the GST package isn't something you can work out in your head. You have to study the figures very carefully. Which is just what Warren & Co did. They compared the position in 1994–95 (the Labor government's second last year) with the position seven years later in 2001–02 (after the GST had been going two years).

They found that the GST was indeed a bit more regressive than the indirect taxes it replaced. On the "progressivity index" (where anything above zero is progressive, anything below zero is regressive and zero is "proportional" – that is, neither progressive nor regressive), the GST scored minus 0.17, whereas the previous taxes scored minus 0.16.

Don't forget, however, that how regressive a tax happens to be is just one dimension of its effect. The other is whether you use the regressive tax to raise a lot of money or a little. (This is known as the "height" of the tax.)

Over the seven years to 2001–02, household pre-tax income rose by 36 per cent in nominal terms, while collections from indirect taxes rose by 59 per cent.

So not only was the GST a bit more regressive than the taxes it replaced, but the Government used it to raise more revenue than before. This meant that the proportion of their income paid in indirect tax by all households rose from 9.3 per cent to 9.7 per cent.

But that's just the first part of the story – and the first step in the sum. Warren & Co found that the progressivity index for income tax rose a fraction from 0.223 to 0.225. So while the GST was making indirect taxes a bit more regressive, income tax was becoming a fraction more progressive.

What's more, the Government was using it to raise a lot more revenue. While household income rose by 36 per cent, revenue from income tax rose by well over 60 per cent.

In consequence, the proportion of income paid in income tax by all households rose from 18.6 per cent to 19.5 per cent.

What was it that caused income tax to become a fraction more progressive? The same thing that caused income-tax collections to grow so strongly: bracket creep.



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In other words, the huge income-tax cut that accompanied the introduction of the GST in July 2000 wasn't sufficient to outweigh the Government's failure to index the tax scales every year.

Income tax became a fraction more progressive because the absence of tax indexation hit higher income-earners a bit harder than it hit lower income-earners. Finally, if we lump together all the other federal and state taxes – but particularly company tax – we find that they're mildly regressive. But their score on the progressivity index improved a bit from minus 0.08 to minus 0.07.

This favourable development, however, was pretty much offset by the fact that these taxes, too, were used to raise a lot more revenue. The proportion of income paid in "other taxes" by all households rose a little from 15.9 per cent to 16.1 per cent.

Now, let's start putting it all together. Because income tax and other taxes became a bit more progressive at the same time as the GST was making indirect taxes a bit more regressive, and because income tax raises about twice as much revenue as indirect taxes do, the combined effect was actually to make the whole tax system a little more progressive.

The system's score on the progressivity index rose from 0.035 to 0.037. (Note, however, that this very low score – not far above zero – means the total tax system is only just progressive. It's a bit more redistributive than if it was only proportional – that is, if everyone was losing the same percentage of their income – but not by much.)

So far, we've been looking at how progressive the tax system is and then, by taking account of the increase in the amount of revenue raised by it, at how much redistributing of income from rich to poor it's doing.

But now let's look at what happened to the distribution of income over the seven years to 2001–02 and what part the tax system played in the change.

The most common way of summarising the inequality of incomes between households is to use the "Gini coefficient". If the coefficient was zero, that would mean income was divided perfectly equally between all households, if it was 1, that would mean one household had all the income.

According to Warren & Co's figuring, the distribution of pre-tax income became a bit more unequal over the period, with the Gini rising from 0.33 to 0.36.

But the distribution of after-tax income hardly moved, with the Gini virtually unchanged at 0.33.

So, notwithstanding the introduction of the evil GST, the tax system became a little more progressive and redistributive, and this was sufficient to counteract a worsening in the distribution of pre-tax income, leaving the distribution of after-tax income essentially unchanged.

Warren & Co conclude that, despite all the changes during the seven-year period – in the tax and transfer system, the economy and the characteristics of households – the distribution of the tax burden and the distribution of household income were remarkably stable. (p. 70)

Several countries (e.g., Austria, Australia, France) have put particular effort into simplifying tax law for the self-employed and small business owners. Nevertheless, concerns with complexity remain. In 'Markets in Vice, Markets in Virtue', J. Braithwaite argues for a complete