

# eJournal of Tax Research

Volume 5, Number 1     July 2007

## CONTENTS

- 5     Fiscal Misperceptions Associated with Tax Expenditure Spending: the Case of Pronatalist Tax Incentives in Singapore  
**Poh Eng Hin**
- 40    What Future for the Corporate Tax in the New Century?  
**Richard S. Simmons**
- 59    Charities for the Benefit of Employees: Why Trusts for the Benefit of Employees Fail the Public Benefit Test  
**Fiona Martin**
- 71    Responsive Regulation and the Uncertainty of Tax Law – Time to Reconsider the Commissioner’s Model of Cooperative Compliance?  
**Mark Burton**
- 105   Unravelling the Mysteries of the Oracle: Using the Delphi Methodology to Inform the Personal Tax Reform Debate in Australia  
**Chris Evans**
- 135   The Marginal Cost of Public Funds for Excise Taxes in Thailand  
**Worawan Chandoevwit and Bev Dahlby**

# eJournal of Tax Research

## EDITORS

**Binh Tran-Nam**, Atax, The University of New South Wales, Australia

**Michael Walpole**, Atax, The University of New South Wales, Australia

## EDITORIAL BOARD

**Professor Robin Boadway**, Department of Economics, Queen's University

**Associate Professor Cynthia Coleman**, Faculty of Economics and Business, University of Sydney

**Professor Graeme Cooper**, Faculty of Law, University of Sydney

**Professor Robert Deutsch**, Atax, The University of New South Wales

**Professor Chris Evans**, Atax, The University of New South Wales

**Professor Judith Freedman**, Faculty of Law, Oxford University

**Professor Malcolm Gammie**, Chambers of Lord Grabiner QC, London

**Professor Jeyapalan Kasipillai**, School of Accountancy, Universiti Utara Malaysia

**Professor Rick Krever**, Department of Law and Taxation, Monash University

**Professor Charles McLure Jr.**, Hoover Institution, Stanford University

**Professor John Prebble**, Faculty of Law, Victoria University of Wellington

**Professor Joel Slemrod**, University of Michigan Business School

**Professor John Tiley**, Centre for Tax Law, Cambridge University

**Professor Jeffrey Waincymer**, Faculty of Law, Monash University

**Professor Neil Warren**, Atax, The University of New South Wales

**Professor Robin Woellner**, Faculty of Law, James Cook University

## PRODUCTION EDITOR

**Cindy Chan**, Atax, The University of New South Wales

## PUBLISHER

Atax is the tax school in the Faculty of Law at The University of New South Wales. We are the largest tax school in any university in Australia, bringing together a team of expert academic staff with backgrounds in law, commerce, tax, accounting and economics. At Atax, we're working towards building excellence in the tax profession, looking at tax from both a theoretical and practical perspective.



# **eJournal of Tax Research**

## **EDITOR'S NOTE**

The *eJournal of Tax Research* is a refereed journal that publishes original, scholarly works on all aspects of taxation. It aims to promote timely dissemination of research and public discussion of tax-related issues, from both theoretical and practical perspectives. It provides a channel for academics, researchers, practitioners, administrators, judges and policy makers to enhance their understanding and knowledge of taxation. The journal emphasises the interdisciplinary nature of taxation. To ensure the topicality of the journal, submissions will be refereed quickly.

## **SUBMISSION OF ORIGINAL MATERIAL**

Submission of original contributions on any topic of tax interest is welcomed, and should be sent as an email attachment to the Production Editor at <ejtr@unsw.edu.au>. Submission of a manuscript is taken to imply that it is an unpublished work and has not already been submitted for publication elsewhere. Potential authors are requested to follow the "Notes to Authors", which is available from the journal's website.



# eJournal of Tax Research

---

Volume 5, Number 1      July 2007

---

## CONTENTS

- 5      Fiscal Misperceptions Associated with Tax Expenditure Spending: the  
Case of Pronatalist Tax Incentives in Singapore  
**Poh Eng Hin**
- 40     What Future for the Corporate Tax in the New Century?  
**Richard S. Simmons**
- 59     Charities for the Benefit of Employees: Why Trusts for the Benefit of  
Employees Fail the Public Benefit Test  
**Fiona Martin**
- 71     Responsive Regulation and the Uncertainty of Tax Law – Time to  
Reconsider the Commissioner's Model of Cooperative Compliance?  
**Mark Burton**
- 105    Unravelling the Mysteries of the Oracle: Using the Delphi Methodology  
to Inform the Personal Tax Reform Debate in Australia  
**Chris Evans**
- 135    The Marginal Cost of Public Funds for Excise Taxes in Thailand  
**Worawan Chandoevmit and Bev Dahlby**

# Fiscal Misperceptions Associated with Tax Expenditure Spending: The Case of Pronatalist Tax Incentives in Singapore

**Poh Eng Hin \***

## ***Abstract***

Tax expenditures are a potentially expedient means through which politicians can implement spending programs that target benefits at a select few while ensuring that the cost and distributive effects of such programs remain largely imperceptible to the majority. This paper reports the results of an exploratory study to assess the extent and determinants of public awareness of pronatalist tax policy in Singapore, and of public perceptiveness of the cost and distributive outcomes of these pronatalist tax incentives. It is found that survey respondents largely are aware of the existence of the incentives. However, there is widespread ignorance (if not misperceptions) of the spending implications and hidden cost associated with these incentives and of their distributive biases along eugenic, income and ethnic dimensions. Non-beneficiaries of the tax expenditures not only are less likely to be aware of the existence of the incentives, they are also less likely to be perceptive of the distributive effects. Overall, the empirical findings are a testimony to why the tax expenditure route has proven to be such a politically expedient way for the Singapore Government to implicitly pursue its policy of selective pronatalism.

## **INTRODUCTION**

Voters' ability to accurately perceive the burdens and benefits associated with tax and spending decisions underpins the effective working of any system of taxation by democratic government. The important role of fiscal consciousness in affecting fiscal choice has motivated extensive and wide-ranging empirical research. Surveys have been carried out to investigate public consciousness of various aspects of the fiscal system, including knowledge of taxes and spending programs<sup>1</sup>, consciousness of tax burdens and the benefits from public expenditures<sup>2</sup>, and cognisance of the fiscal

---

\* Assistant Professor at the Nanyang Business School of Nanyang Technological University, Singapore.  
Email: aehpoh@ntu.edu.sg

<sup>1</sup> For instance, based on surveys of public knowledge of the tax system in the US, Page (1983), Hansen (1983), and Steel and Lovrich (1993) concluded that people know very little and that there are widespread misconceptions about federal, state and local taxation. In the UK, Cullis and Lewis (1985), and Cullis and Jones (1987) found widespread voter ignorance of sources of government revenue, with income tax being the relatively more visible tax. Schokkaert (1988) surveyed voter knowledge of local government financing in a Belgian municipality while in the Netherlands, Francken (1986) examined public knowledge of government contributions to the costs of providing semi-collective public services in the form of legal advice, public transport and hospital services.

<sup>2</sup> Early studies into taxpayer consciousness of their burdens under the US federal personal income tax include Enrick (1963 and 1964), Van Wagstaff (1965) and Gensemer et al (1965). A more recent study, Fujii and Hawley (1988), found no evidence of systematic misperceptions of personal marginal income tax rates. Marginal income tax rate consciousness was also the subject of a study in the UK by Lewis (1978), who reported an underestimation in general of the tax rates. Gemmell et al (2003) relied on micro survey data to investigate public consciousness of the additional income tax and value added tax (VAT) liabilities that households had to pay under certain alternative specified changes in tax rates.

connection between the benefits of public sector output and the tax costs of such output<sup>3</sup>. Econometric analyses of archival data<sup>4</sup> as well as experimental research techniques<sup>5</sup> have also been used to investigate the extent, sources and consequences of fiscal illusion. Fiscal illusion (which potentially results from the lack of fiscal consciousness) is described in the literature (e.g. Oates, 1988) as voters' systematic misperception of important fiscal parameters, leading possibly to their inability to make informed decisions and hence the distortion of their fiscal choices. Various structural or institutional elements of the fiscal system have long since been identified as potentially contributing to fiscal illusion (see e.g. Puviani, 1903 and Buchanan, 1967). These include the following: fragmentation of the budgetary process into taxing and spending decisions; diversity in the government's revenue base (including the relative importance of non-tax revenues in the form of debt and inter-government grants); and lack of visibility of taxes or tax increases owing to reasons such as the income elasticity of the tax system, reliance on indirect taxes that are hidden in prices or otherwise ambiguous in incidence, administering tax collections by requiring tax to be withheld at source or by spreading out tax payments over time, etc.

One aspect of fiscal consciousness where relatively little research appears to have been done concerns the potential illusory effects associated with the use of tax expenditures as a means of public spending. Since the seminal work of Surrey (1973), much has been written to conceptualise the idea of a tax expenditure as being equivalent to a direct spending program, as well as to underscore the need for, and to put into effect, processes for the budgetary oversight of tax expenditure spending. Hardly any research, though, has been done to study public perceptions and consciousness in connection with the use of these tools of government spending. In

---

They found that there was fairly extensive ignorance of personal income tax and VAT liabilities. Contrary to the usual fiscal illusion hypothesis, there was overestimation (rather than underestimation) of tax costs, particularly for the relatively less visible VAT.

<sup>3</sup> Studies (see Lewis, 1982; and Furnham and Lewis, 1986 for reviews) generally have found a failure on the part of voters to translate public service benefits into tax costs and that there is the lack of a fiscal connection between choices made on taxes and those on public spending. Winer (1983) suggests that the separation of taxing and spending decisions characteristic of most representative democracies may generate fiscal illusion and contribute to increased public spending.

<sup>4</sup> These studies use field data, typically at local government level, to establish the validity of various hypotheses of fiscal illusion. For instance, the revenue complexity hypothesis postulates that the complexity and lack of transparency of sources of public financing cause voters to systematically underestimate the tax price of public sector output, in turn, leading to excessive demand for such output and an increase in the size of the public sector. See Oates (1988), and Dollery and Worthington (1996) for a review of the theory and empirical work relating to this and other fiscal illusion hypotheses. The findings from such studies have been viewed with some scepticism for a number of reasons. They do not observe the magnitude of voter misperceptions directly but rather rely on highly aggregated proxies to represent fiscal complexity and, by implication, the extent of fiscal illusion. Furthermore, they fail to show unambiguously that the alleged distortion of fiscal choice is a consequence of fiscal illusion. As a response to these criticisms, some recent studies have relied on surveys (e.g. Gemmell et al, 2003 and 2004) and experimental designs (e.g. Sausgruber and Tyran, 2004) in order to measure tax misperceptions directly and to incorporate these into formal models of the demand for public expenditures or models seeking to explain voters' preferences amongst alternative changes to the existing tax structure to finance public expenditure increases.

<sup>5</sup> Using an experimental design to investigate the causes and consequences of tax burden misperceptions, Sausgruber and Tyran (2004) found that the tax burden associated with an indirect tax is systematically underestimated but no such systematic misperception occurred with an equivalent direct tax. They also found that in the indirect tax scenario, illusion-prone participants were more likely, compared to under the direct tax, to approve of an expenditure (redistribution) proposal that was not in their material self-interest

this regard, some specific issues that are rarely addressed empirically include the following:

1. To what extent is there public cognisance of the hidden (opportunity) cost associated with tax expenditure spending and, hence, of the equivalence between a tax expenditure and a direct expenditure in the sense that both are spending programs that entail effectively an allocation and re-distribution of public resources?
2. To what extent is there public consciousness of how benefits are distributed under particular tax expenditure programs?
3. Who are more likely to be cognisant or conscious of the matters referred to above? For instance, is there any difference in perceptiveness, say, between beneficiaries and non-beneficiaries of the spending program?

The issues outlined above are important from a public choice perspective. If voters, on the whole, are ignorant of the equivalence between a tax expenditure and a direct expenditure and, hence, are imperceptive to invisible spending through the tax system, politicians will be better able to conceal spending programs by structuring them as tax expenditures. Such concealment may be motivated by the desire to have the public sector appear small or to hide potentially unpopular spending programs such as those targeted at vested interest groups or those entailing a distribution of benefits that is likely to be contentious. Such covert spending strategies will meet with relatively less public resistance, particularly in the absence of tax expenditure reporting and where non-beneficiaries of the tax expenditure programs are not conscious of the costs of such spending and of how the benefits are distributed. In other words, if widespread misperception persists that a tax expenditure program is costless (or if the costs are underestimated) and if the distribution of the benefits is obscured, fiscal choice is potentially distorted since, in the absence of such misperception, voters may well have objected to the spending program.

The present paper makes an initial attempt at filling the gap highlighted above in the fiscal consciousness literature. It presents the results of an exploratory survey research on the extent and determinants of fiscal misperceptions arising from the use of tax expenditures to deliver pronatalist subsidies to married couples in Singapore. The remainder of the paper is organised as follows. Section 2 presents a policy tools approach in considering the political and administrative reasons behind the use of tax expenditures (vis-à-vis direct subsidies) as an instrument of fiscal spending. It reviews the literature on the political economy of tax expenditure spending and the few existing theories that speculate on the likely level of public consciousness of the costs and distributive effects of tax expenditures. Section 3 describes the pronatalist tax incentives in Singapore and the political, fiscal, social and institutional contexts within which the incentives operate. Sections 4 and 5 present respectively the methodology and the findings of the study. Conclusions and directions for future research are contained in Section 6.

**TAX EXPENDITURES VERSUS DIRECT SUBSIDIES: A POLICY TOOLS ANALYSIS**

This section presents a policy tools approach<sup>6</sup>, advocated by writers such as Salamon (1981), Hood (1986), and Salamon and Lund (1989), in considering some of the political and administrative factors that favour the use of tax expenditures as an instrument of fiscal spending. Both a direct subsidy and a tax expenditure confer a fiscal benefit by lowering for the targeted beneficiary the relative cost of undertaking the favoured activity. However, while a direct subsidy entails a disbursement out of the government's revenue, a tax expenditure operates through the government's forbearance in the first instance to collect tax revenue otherwise due under the normative tax structure. There is therefore the absence of an audit trail in the traditional budgetary accounts linking the fiscal spending to an explicit expenditure of government revenue. This fusion of the government's taxing and spending functions can be a source of fiscal illusion if the spending implications are not generally perceived.

Much of the traditional literature on tax policy design (e.g. Report of the Royal Commission on Taxation, 1966; Bittker, 1967; Pechman, 1977) argued for the removal of spending programs from the tax system in order to preserve a comprehensive tax base for tax neutrality, fairness and simplicity. Broadening the tax base was indeed one of the main features characterising tax reforms worldwide in the 1980s and early 1990s (US Department of the Treasury, 1984; Sandford, 1993). The idea of spending through the tax system was given prominence from the late 1960s by Surrey's conceptualisation of the term 'tax expenditure'. Since then, much has been said (e.g. Surrey and McDaniel, 1985) about the hidden cost and lack of public accountability associated with tax expenditure spending<sup>7</sup> as well as other supposed deficiencies of tax expenditures such as their 'windfall' and 'upside-down subsidy' effects.<sup>8</sup> More recent contributions, such as Toder (2000), and Weisbach and Nussim (2004), have acknowledged that many of the alleged problems with tax expenditure spending are actually criticisms of the content and design of the underlying spending programs rather than of the use of tax expenditures per se as the means to deliver those

---

<sup>6</sup> The policy tools approach entails the study of the political economy of policy tools, and advocates shifting the focus of policy analysis from individual programs and policies to the generic tools or instruments of government action (Salamon, 1981).

<sup>7</sup> Tax expenditures represent legal entitlements that, once enacted, tend to be relatively permanent features of the tax system divorced from regular parliamentary review and budgetary oversight. Unlike direct expenditures, tax expenditures do not compete for fiscal resources, are not subjected to annual reviews and authorisations, and are infrequently subjected to efficiency/effectiveness audits. The hidden nature of tax expenditure spending erodes government accountability for the underlying use of public resources. Furthermore, the cost, level of benefits and distribution of benefits under a tax expenditure program (other than a refundable tax credit) are inherently affected by changes in the incidence of the tax, in turn, resulting from changes in the fiscal characteristics of the taxpayers and/or in the tax rate structure or other provisions of the tax code. Tax expenditures are, in this sense, open-ended commitments since their costs (and effects) can change even without any explicit program decisions taken to amend the relevant legislation regulating the tax expenditures.

<sup>8</sup> The windfall effect results from a tax expenditure rewarding behaviour that would have been undertaken anyway even in the absence of the incentive. Like many of the other alleged deficiencies of tax expenditures, this effect is not necessarily peculiar to tax incentives but may also apply in the case of direct subsidies.

The upside-down subsidy effect (i.e. benefits are distributed amongst beneficiaries in an income-regressive manner) arises in the case of a tax expenditure structured as a reduction in the tax base (or as a non-refundable tax credit) in a tax system characterised by a progressive rate structure. This deficiency is overcome by structuring the tax expenditure as a refundable tax credit.



programs. These deficiencies therefore may be overcome by appropriate design of the tax expenditure provisions, and by subjecting tax expenditure proposals and legislation to formal budgetary control and periodic review. In short, there appears to be no reason why tax expenditures cannot be designed to replicate the effects of direct subsidies on resource allocation and income distribution. However, tax expenditures do differ from direct expenditures in that different government agencies or departments are vested with jurisdiction over the spending programs – a tax expenditure program inevitably requires the involvement of the tax administration whereas a direct expenditure program is administered by a separate spending agency. Weisbach and Nussim frame the question of whether a spending program should be implemented through the tax system or via a direct expenditure program as one of institutional design, wherein the concern should be with how best to implement overall government policy rather than focussing merely on tax policy design considerations in isolation. More specifically, a spending program should be implemented as a tax expenditure if the benefits of coordination resulting from integrating the program with the tax system exceed the benefits of specialisation resulting from the administration of the program by a separate agency with the requisite expertise to better evaluate applications and allocate resources. In line with this, Toder suggests that a tax expenditure is a particularly suitable means to implement a spending program if:

- the program seeks to encourage a clear and broadly defined activity where objective eligibility criteria can be established so that there is little need for administrative discretion or expert judgement to determine eligibility and the amount of benefits to be dispensed;
- the eligibility criteria can be framed with reference to measures for which data is already reported in tax returns (e.g. eligibility based on taxable income or other fiscal circumstances); and
- the annual tax-reporting period is an appropriate time frame (or may be suitably adapted) for determining eligibility, benefit levels and timing of payments under the program.

Apart from the administrative considerations above, there may also be perceptual differences associated with the different modes of fiscal spending. Voters may perceive differently the value, the distribution and the cost of the benefits delivered through the tax system as opposed to through a direct subsidy. The ability to perceive the cost and distributive implications may also differ between the few who benefit from the spending program and the vast majority of taxpayers in general (non-beneficiaries) who effectively fund that program. There has not been all that much literature that addresses the psychological aspects of tax expenditures. One strand of literature addresses the issue from the perspective of recipients of tax subsidies, and contends that subsidies delivered through tax expenditures are more likely to be better received because these subsidies are less likely to be seen as a form of government assistance compared to direct subsidies. For instance, Woodside (1983 and 1986) suggests that the indirectness and relative invisibility of tax expenditure spending permit such forms of government intervention to be perceived as less intrusive on the private sector and less easily associated with the government. Similarly, Surrey and McDaniel speculate that beneficiaries of tax expenditure programs psychologically may feel that they are not recipients of state subsidies because they perceive tax

subsidies to be no more than allowing them to retain what is essentially their own money.

There has also been some attempt to explain the psychology behind tax expenditures based on what decision theorists refer to as the endowment effect, i.e. that people systematically value opportunity costs less than equivalent out-of-pocket costs. If voters are susceptible to the endowment effect, they will value the opportunity cost (in terms of foregone tax revenue) associated with a tax subsidy less than the explicit cost of funding an equivalent direct subsidy. This is on account of the fact that a tax subsidy, unlike a direct subsidy, does not entail any explicit outflow of money from the Treasury to recipients of the subsidy. The implication is that voters in general will perceive a tax expenditure as involving a smaller effective sacrifice or expenditure of public resources compared to an equivalent direct subsidy. Furthermore, Shaviro (1990) argues that not everyone is equally susceptible to the endowment effect – beneficiaries of tax subsidies are likely to be less susceptible to this bias than non-beneficiaries. The result is that beneficiaries generally are able to perceive the benefits that they enjoy from a tax expenditure whereas non-beneficiaries will be less perceptive of the spending implications and will either fail to perceive or, at the very least, underestimate the cost of those benefits in terms of the tax collections foregone. Hansen (1983) makes a similar assertion that the benefits under a tax expenditure program tend to be highly visible to beneficiaries targeted by the program but virtually invisible to non-beneficiaries. She further contends that the total costs of the overall program will be hidden from both beneficiaries and non-beneficiaries alike.

The psychological considerations discussed above have implications on program implementation from a political or public choice perspective. They underscore the political invisibility of tax expenditure spending in terms of its hidden costs<sup>9</sup> and in terms of non-beneficiaries' inability to perceive the benefits enjoyed by beneficiaries. If these contentions are valid, then from a public choice perspective, tax expenditures offer a politically expedient means of concealing spending programs that voters may otherwise find objectionable if implemented in the full glare of a direct expenditure program. Various motivations may be behind such covert spending through the tax system. For instance, politicians may wish to reward political patronage by targeting spending programs that favour a minority or special-interest group without imposing any perceived cost on the majority.<sup>10</sup> They may desire to foster the illusion that the public sector is smaller than the true extent of the government's allocative and

---

<sup>9</sup> The identification and estimation of tax expenditures in tax expenditure reports in many jurisdictions have since led to their increased political visibility. Even so, tax expenditure reporting in many of these jurisdictions has not been fully integrated into the annual budget appropriations process and systematic legislative review of tax expenditures through the formal budgetary process has not been widely instituted (OECD, 1996). For a more recent paper on the situation in Australia and Canada, see Wonna (2003).

Notwithstanding the institution of tax expenditure reporting, if voters at large continue to be unable to appreciate the spending implications of tax expenditures, politicians will continue not to be pressured into reducing such hidden spending. Indeed, the experience in the US has been that despite tax expenditure reporting, tax expenditures have proliferated and very few of them have actually been eliminated (Steurler, 1995).

<sup>10</sup> Zelinsky (1993) offers a different view. He argues, from a US perspective, that tax institutions are exposed to more competitive and visible political processes given the numerous and diverse constituencies they serve. This is unlike the specialised and limited clientele served by institutions that design and administer direct expenditure programs. Accordingly, tax institutions are less susceptible to interest group capture and better positioned to make decisions informed by expertise.

distributive interventions since the use of tax expenditures, instead of direct subsidies, enables lower taxes and lower spending to be reported in traditional budgetary accounts.<sup>11</sup> Spending through the tax system may also be undertaken to pursue certain economic, social or even ideological goals that entail controversial or unpopular redistributive effects. Implementing a spending program by way of an income tax deduction or non-refundable tax credit is an administratively convenient and politically expedient way to conceal regressively targeted benefits in view of the inherent ‘upside-down subsidy’ effect brought about by progressivity in the income tax rate structure. In recent literature, Sullivan (2000), and Collier and Luther (2003) attributed some of the above reasons as motivations behind tax expenditure spending by the Clinton Administration in the US and the Thatcher Administration in the UK respectively.<sup>12</sup> People’s inability to fully understand the distributive implications of tax deductions has been empirically shown by Baron and McCaffery (2004) in two recent experimental studies conducted on the World-Wide Web. They found that many participants who favoured tax deductions as a means of government provision of various goods and services had either ignored or failed to consider the fact that, given a progressive tax rate structure, tax deductions will benefit the rich relatively more than the poor. Participants’ tendency to favour tax deductions was contrary to their preferences in support of redistribution from the rich to the poor. When these participants were informed of the effects of tax deductions, they became less likely to favour the use of the deductions. However, the drop in support for the deductions was only moderate, indicating that many of these participants continued to misunderstand the effects of the deductions.

To the author’s best knowledge, there has not been any empirical validation of whether and, if so, to what extent the endowment effect or other cognitive biases contributes to any perceptual differences between a tax subsidy and an equivalent direct subsidy.<sup>13</sup> There has also not been any empirical work investigating the extent and determinants of public consciousness of and misperceptions associated with the costs and distributive outcomes of tax expenditure programs, an issue which is explored in this paper. Empirical testing of any hypothesis of fiscal misperception in this regard probably has to be undertaken on a case-by-case basis to evaluate the validity of the theory as it applies to specific tax expenditure programs in particular jurisdictions.<sup>14</sup> Conclusions drawn from any one such study may well have limited

---

<sup>11</sup> Shaviro (2004) refers to this as ‘spending illusion’, i.e. the confusion between the actual size of government and the nominal dollar flows between the government and the private sector that are denominated as ‘taxes’ and ‘spending’.

<sup>12</sup> Sullivan describes the Clinton Administration’s pervasive use of the tax system to implement spending programs as ‘tax expend’ liberalism and attributes such a strategy to political expedience. Collier and Luther describe how the Thatcher Administration used tax expenditures to promote the supply side changes that were integral to its economic and ideological policies. The significant reliance on tax expenditures occurred despite the well-known stand of the Conservatives in advocating tax neutrality, reduced government intervention, and free-market forces, and despite the advent of tax expenditure reporting in the UK. The authors also emphasised that the various programs, many of which conferred the most benefits to the richest individuals or in respect of the most expensive properties, would not have been politically acceptable had they been implemented through payment of direct monetary subsidies.

<sup>13</sup> There are, however, studies exploring the cognitive biases at play in different framing situations that compare a tax subsidy with an equivalent policy framed as a tax penalty – see Traub and Siedl (1999), and McCaffery and Baron (2004).

<sup>14</sup> Such an approach is recommended by advocates of policy tools analysis in order “to relate the characteristics of tools to actual program operations and outcomes” (Salamon, 1989, p 261).

generalisability given the specific nature, objectives and structure of the particular tax expenditure program studied and in view of jurisdictional-specific variables that may have a bearing on the general level of fiscal consciousness. This paper presents one such specific inquiry in investigating the extent and determinants of fiscal misperceptions arising from the use of tax expenditures in the context of pronatalist policy in Singapore.

## PRONATALIST TAX POLICY IN SINGAPORE

Fertility rates in Singapore declined dramatically between the 1960s and the mid 1970s as a result of social and cultural transformation brought about by economic development, the availability of labour market participation opportunities for women, and a comprehensive antinatalist policy on the part of the Government. However, persistent below-replacement fertility rates in the 1980s led to fears that a shrinking and ageing population would adversely affect the sustainability of economic growth and the adequacy of existing health-care and social support systems. Furthermore, a trend emerged whereby many highly educated women were either remaining single or marrying later and having significantly fewer children than their less-educated counterparts. This raised concerns that the higher-educated and more talented strata of the population were not adequately replacing themselves.<sup>15</sup> These concerns led eventually to a reversal in the national fertility policy in the 1980s from one of antinatalism to one of selective pronatalism, with various specific financial and non-financial incentives announced in 1984 and 1987.<sup>16</sup>

The 1984 changes consisted of eugenic measures aimed at improving the quality of the population. These measures were an attempt at correcting the observed lopsided fertility pattern mentioned above and were founded on the rather controversial premise that the intelligence of the child is primarily inherited and principally determined by the parents' educational attainments. The 1987 changes were more extensive and involved relaxing some of the existing antinatalist measures whilst introducing certain new pronatalist initiatives in a bid to encourage third- and fourth-order births from couples who could afford the long-term financial commitment of having more children. The emphasis on affordability reflected the stand that parents remain primarily responsible for the upbringing of their children and that any pronatalist intervention on the part of the government should not therefore result in short-term incentives for low-income couples to have more children at the expense of longer-term social ills and a strain on public welfare resources.

By predicating the pronatalist policy on the basis of affordability, two other certainly more contentious social engineering goals could be implicitly pursued. Firstly, because higher-income couples generally also possess higher educational qualifications (a proxy measure for natural talent and intelligence), the incentives introduced in 1987 were consistent with the eugenic policy of encouraging higher fertility amongst the better-educated, and presumably more intelligent and talented, strata of the population. The 1984 changes, which explicitly addressed the eugenic

---

<sup>15</sup> This observation was first given political prominence by the then Prime Minister, Lee Kuan Yew, in his 1983 National Day Rally speech. He noted the strong negative correlation between a married woman's fertility and her educational attainment. For instance, based on 1980 population census data, women with little or no formal education had 3.5 children on the average compared to just 1.6 children for women who were university graduates.

<sup>16</sup> See Saw (2005) for a comprehensive account of the measures introduced.

concerns, had resulted in a vehement public debate, widespread resentment, and even protest votes cast against the governing political party at the 1984 General Elections. One particularly castigated measure was the Graduate Mother Priority Scheme, which gave priority in the primary school registration process to children whose mothers were university graduates with at least three children. This measure was widely seen as symbolic of the elitism associated with the policy changes in 1984. It attracted widespread adverse public opinion, including resentment from graduate mothers themselves, and had to be abolished just one year after its introduction. The subsequent fertility policy changes in 1987 dropped the explicit reference to eugenic considerations although this goal was still pursued, albeit implicitly, through tax expenditures that targeted the fertility incentives mainly at higher-income couples.

The second goal implicitly pursued by predicating the pronatalist policy on parents' affordability was the correction of the fertility imbalance between the two main ethnic groups, i.e. the Chinese and the Malays. The Chinese, who make up the significant majority of the population, have the lowest fertility rate whereas the Malays, who form the largest minority ethnic community, have the highest.<sup>17</sup> The Malays generally also have lower incomes and lower educational attainments compared to the Chinese. By targeting benefits mainly at higher-income and better-educated couples, the inherent effect of the various policy changes was to encourage more births from the Chinese in an implicit attempt to address the fertility imbalance between the two ethnic groups.<sup>18</sup>

At the time of the survey reported in this paper (December 2001), the main pronatalist tax expenditures in Singapore (which essentially evolved from the 1984 and 1987 policy announcements) consisted of the Enhanced Child Relief (ECR) and, more importantly, the Special Tax Rebates (STR).

ECR was introduced to encourage educated married women to have children whilst remaining economically active. It took the form of an annual income tax deduction that could be deducted only against the tax-assessable income of the child's mother. Furthermore, the mother would be eligible for ECR only if she possessed at least the prescribed minimum educational qualification.<sup>19</sup> The annual ECR deduction per child (up to the fourth child of the family) was a stipulated percentage of the mother's annual earned income<sup>20</sup>, and this percentage increased (from 5% to as high as 25%) with the birth-order of the child.

---

<sup>17</sup> Based on population census data, the Chinese made up 77.7% of the resident population in 1990, compared with 14.1% and 7.1% respectively for the Malays and the Indians. In that same year, the total fertility rate of the Chinese was 1.71 compared to those of the Malays and Indians at 2.73 and 1.99 respectively. Furthermore, the Chinese (especially Chinese female university graduates) also had the lowest marital rate and, amongst those who did marry, had the highest age at the time of marriage.

<sup>18</sup> Although this aim obviously was not explicitly stated as an objective of the pronatalist policy, the Singapore Government did express its observation and concern that the decline in overall fertility was largely attributed to the fact that the Chinese were not replacing themselves (The Straits Times, 15.12.1986 and 2.3.1987).

<sup>19</sup> In 2001, the minimum educational qualification was three passes at the General Certificate of Education Ordinary Level (GCE 'O' Level) examinations, or equivalent qualifications.

<sup>20</sup> 'Earned income' refers to the sum of business income, employment income, and taxable pension income, reduced by any allowable business losses. Mothers who were not economically active would not have any earned income and, accordingly, would not have benefited from ECR.

STR took the form of non-refundable tax credits that could be set off against the gross income tax liabilities of the eligible parent/s over a stipulated number of years. These tax credits were first introduced in 1987 in respect of the third child of the family born in/after that year. The incentive was subsequently extended to the fourth child of the family born in/after 1988, and to the second child born in/after 1990. The rebate for the second child comprised a one-time non-refundable tax credit, which could be shared between the child's parents for set-off against their respective gross tax liabilities. The amount of the tax credit ranged from S\$0 to S\$20,000, depending on the mother's age at the time of delivery of the child. The rebates for the third child and for the fourth child consisted of two components. Each component also took the form of a one-time non-refundable tax credit. The first component was a lump sum S\$20,000 tax credit, which could be shared between the child's parents. The second component amounted to 15% of the mother's earned income in the year of birth of the child, and this tax credit could be set off only against the mother's gross tax liabilities.

In most cases, the parent's/parents' gross tax liability/liabilities for the first year after the birth of the child would be insufficient to fully utilise the STR tax credit. In this regard, any balance of the tax credit remaining unutilised could be carried forward for set-off against the future tax liabilities of the eligible parent/s for up to the next eight years. In other words, the maximum period over which each eligible child's STR could be set off was nine years.

The pronatalist tax expenditures were structured so as to provide disproportionately higher tax subsidies to higher-income couples.<sup>21</sup> The structural features that contributed to this income-regressive subsidy effect were:

- the non-refundability and limited carry-forward features of the STR tax credits. This resulted in lower-income parents not being able to fully set off their statutory STR entitlements within the stipulated nine-year period;
- restriction of eligibility for ECR and the second component of STR to the child's mother, with ECR eligibility also dependent on the mother's educational qualification. These incentives therefore were enjoyed only by dual-earner couples, whose family incomes were, on the average, higher than those of single-earner couples;
- quantification of ECR and the second component of STR based on a fixed percentage of the mother's earned income. This caused the statutory amounts of these incentives to increase proportionately with the mother's earned income (although certain caps did apply for ECR at very high levels of earned income); and
- progressivity in the personal income tax rate structure. Since the applicable marginal tax rate increases with income, disproportionately higher tax savings accrued to higher-income parents than to lower-income parents from fixed-dollar tax deductions. The income-regressive subsidy effect caused by the progressive tax rate structure was even more pronounced for ECR given that the statutory amount of this deduction generally increased with earned income (see the preceding point).

---

<sup>21</sup> See Poh (2005) for the valuation of these tax subsidies expressed in their direct subsidy equivalents.

Significant reforms to the personal income tax system in the 1990s and early 2000s contributed to a further skew of the pronatalist tax subsidies in favour of the rich. In particular, the major structural tax reform of 1994, which saw the introduction of the Goods and Services Tax in place of significant cuts in income tax, resulted in some 70% of resident individuals dropping out of the scope of income taxation (IRAS, 1995). This meant that all low-income and some middle-income couples effectively were excluded from enjoying any of the pronatalist tax subsidies from the mid 1990s. Although the significant income tax cuts in the 1990s and 2000s also reduced the tax subsidies enjoyed by high-income and upper middle-income couples, the effect was relatively minimal for high-income couples while the effect for upper middle-income couples was mitigated by an amendment in 1994 that extended the maximum set-off period for the non-refundable tax credits from seven years to nine years.<sup>22</sup>

In summary, the use of tax expenditures to deliver fertility incentives appears to be an administratively and politically expedient way for the Singapore Government to implicitly pursue its policy of selective pronatalism. Other factors that facilitate this strategy include the political dominance and perceived credibility of the governing political party, the culture of top-down policy decision-making, and the absence of any form of tax expenditure reporting that might have highlighted the costs of the incentives. The introduction of the pronatalist tax expenditures in the 1980s was not met with the level of adverse public reaction and widespread resentment that had greeted the equally controversial Graduate Mother Priority Scheme mentioned earlier. This paper investigates whether public acquiescence of these tax incentives may be potentially explained by fiscal illusion.

## METHODOLOGY

### Survey Administration

The findings reported in this paper are based on the responses to certain questions that were included in a survey of 350 married individuals in Singapore. The main purpose of the survey was not to investigate fiscal misperceptions, but rather to study the extent to which respondents take into account the pronatalist tax incentives in their decisions to have children – the main findings, in this respect, are reported in Poh (2004). However, a number of questions had been included in the survey questionnaire to capture respondents' perceptions of the incentives and it is these responses that are of relevance to this paper.

In view of the main objective of the survey, only married couples where the wife was not older than 44 years of age (in the year 2000) were surveyed. It was decided that, between the two spouses, the person filling in the survey questionnaire should be the spouse who had completed the couple's most recent annual income tax return. This requirement was imposed because it was often not possible to survey both spouses, and therefore the requirement ensured that the responses were supplied by that spouse who had at least some level of awareness of the couple's income tax affairs and some level of knowledge of income tax matters in general. It also meant that couples were excluded from the survey in situations where only one of the spouses was involved in the completion of the couple's tax return and he/she was not available to participate in the survey.

---

<sup>22</sup> See Poh (2005) for a more elaborate discussion of the impact of the personal income tax reforms on the pronatalist tax subsidies enjoyed by couples on different incomes.

The survey was conducted in December 2001 through visits made to various randomly selected households living in public flats and private residential properties across the city-state. Respondents were asked to complete a five-page questionnaire available in either English or Mandarin. The survey administrators were on hand to render any clarifications/assistance required by the respondents.

### Sample Profile

The socio-economic profile of the sample of 350 respondents who participated in the survey is presented in Table 1, together with the profile of the relevant population of married individuals in the year 2000.

**TABLE 1: SOCIO-ECONOMIC PROFILES OF THE SAMPLE AND THE POPULATION OF MARRIED INDIVIDUALS (WHERE THE WIFE'S AGE DOES NOT EXCEED 44 YEARS)**

	<u>Sample</u>		<u>Population [1]</u>
	Number of respondents	%	%
Gender			
- Female	127	36.3	50.0
- Male	223	63.7	50.0
	N = 350	<u>100.0</u>	<u>100.0</u> [2]
Age			
- under 30	67	19.6	14.4
- 30 to 39	199	58.4	49.2
- 40 and above	75	22.0	36.5
	N = 341	<u>100.0</u>	<u>100.0</u> [2]
Ethnicity			
- Chinese	288	82.3	77.2
- Malay	42	12.0	14.7
- Indian	16	4.6	7.7
- Others	4	1.1	0.4
	N = 350	<u>100.0</u>	<u>100.0</u> [3]
Highest educational qualification			
- Primary	11	3.1	29.4
- Secondary	123	35.1	54.4
- Tertiary	216	61.7	16.2
	N = 350	<u>100.0</u>	<u>100.0</u> [4]
Annual income (of those working) in the year 2000			
- S\$24,000 and below	46	14.0	37.3
- S\$24,001 to S\$60,000	201	61.1	45.3
- S\$60,001 and above	82	24.9	17.4
	N = 329	<u>100.0</u> [5]	<u>100.0</u> [6]



Occupational status (of those working)			
- Professional/managerial	97	30.8	27.1
- Technical	77	24.4	31.8
- Clerical/sales/service	80	25.4	25.4
- Others (including non-classifiable occupations)	61	19.4	15.6
	N = 315	<u>100.0</u>	<u>100.0</u>
		[7]	[8]
Number of children			
- 0	85	24.3	18.9
- 1	83	23.7	22.9
- 2	125	35.7	35.4
- 3	45	12.9	17.7
- 4	10	2.9	4.1
- 5 or more	2	0.6	1.0
	N = 350	<u>100.0</u>	<u>100.0</u>
			[9]
[1] Population characteristics are derived from census data relating to the year 2000.			
[2] Data is based on COP (2001c) Table 60, relating to married couples.			
[3] Data is based on COP (2001c) Table 60, relating to married couples. Individuals in inter-ethnic marriages have been excluded. This is because the census data does not break down data on couples in inter-ethnic marriages by the ethnicity of the individual spouses. Since Malays are less likely than other races to be in inter-ethnic marriages, the actual proportion of married individuals (with the wife not exceeding 44 years of age) who are Malay is likely to be less than the reported 14.7%.			
[4] Data is based on COP (2001a) Table 16, relating to married individuals of ages not exceeding 44.			
[5] Data excludes 15 respondents who are homemakers. Furthermore, the sample data is based on annual income from all sources.			
[6] Data is based on COP (2001b) Table 36, relating to income from work (i.e. business and employment only) of married individuals of all ages. Including married individuals of all ages overstates the proportion in the lowest income group because of the presence of the elderly who are more likely to possess only low-level skills (and therefore earn low incomes) or are more likely to be undertaking part-time work.			
[7] Data excludes 15 respondents who are homemakers.			
[8] Data is based on COP (2001b) Table 19, relating to married individuals of all ages.			
[9] Data is based on COP (2001a) Table 25, relating to ever-married females (i.e. including divorcees and widows) of ages not exceeding 44.			

The sample appears to over-represent males compared to females but this is essentially due to the fact that it is usually the husband (rather than the wife) who completes the couple's income tax return and who is therefore selected to participate in the survey. Those with tertiary education are over-represented although, to some extent, this was

intended by the researcher given the specialised and technical nature of the subject matter of the survey. Intuitively, those with low education (and incomes) are less likely to gain from the tax incentives, less aware of their existence and less knowledgeable of their effects. It therefore made sense to sample proportionately more of higher-educated (and higher-income) respondents since it is this group to whom the incentives are targeted and who will enjoy the largest proportion of the benefits. For this same reason, those in the lowest income group (annual incomes not exceeding S\$24,000) are under-represented – in fact, since the major tax reform of 1994 (discussed earlier in Section 3), these individuals generally are not liable to pay any income tax and will almost certainly not benefit at all from the tax incentives. Finally, there is also a slight over-representation of married individuals who are younger, who have no children, and who are in white-collar occupations.

### Survey Questions

The survey questionnaire incorporated a number of questions that sought to ascertain respondents' awareness, knowledge and perceptions of the STR and ECR tax incentives. Five of the questions elicit respondents' perceptions on various aspects pertaining to the cost and distributive effects of the incentives and these responses are of particular relevance to this paper. The five questions are reproduced below and are numbered Q1, Q2, Q3, Q4A and Q4B for ease of reference:

Q1: "Tax incentives, such as STR and ECR, reduce the taxes paid by those benefiting from the incentives. Unlike a direct cash subsidy, the Government does not directly pay out any money to those benefiting from the tax incentives. Which statement below do you agree with?"

- Tax incentives, such as STR and ECR, are provided at a cost to taxpayers at large since the Government is spending (i.e. allocating and re-distributing) resources.
- Tax incentives, such as STR and ECR, are provided without any cost to taxpayers at large since the Government is not spending (i.e. not allocating or re-distributing) any resources.
- I don't know."

Q2: "Malay couples form about 15% of all married couples of child-bearing age. Which statement below do you agree with?"

- Malay couples enjoy more than 15% of the total tax savings under the STR and ECR tax incentives because a Malay couple, on the average, has more children than a non-Malay couple.
- Malay couples enjoy less than 15% of the total tax savings under the STR and ECR tax incentives even though a Malay couple, on the average, has more children than a non-Malay couple.
- I don't know."

Q3: "Which statement below do you agree with?"

- Generally, a higher-educated married individual enjoys more tax savings from the STR and ECR tax incentives than does a lower-educated individual with the same number of children and in the same circumstances.
- Generally, a higher-educated married individual enjoys less tax savings from the STR and ECR tax incentives than does a lower-educated individual with the same number of children and in the same circumstances.
- I don't know."

Q4: “Assume that there are two married individuals, H and L. Both are allowed STR and/or ECR for the same number of children and are in exactly the same circumstances, except that H’s annual income (say, \$60,000) is two times L’s annual income (say, \$30,000).

[A] Which statement below do you agree with?

- H’s tax savings from STR and/or ECR will be more than L’s tax savings.
- H’s tax savings from STR and/or ECR will be less than L’s tax savings.
- I don’t know.

[B] Which statement below do you also agree with?

- H’s tax savings from STR and/or ECR will be more than two times L’s tax savings.
- H’s tax savings from STR and/or ECR will be less than two times L’s tax savings.
- I don’t know.”

Responses to Q1 will reveal if there is misperception on the part of respondents in thinking that a tax expenditure is costless and, in that sense, not equivalent to a direct expenditure. Responses to Q2, Q3 and Q4 will reveal if respondents are able to perceive the distribution of the pronatalist tax subsidies as effectively biased against Malay couples but favouring higher-educated and higher-income couples. Q4A presents the distribution of the tax subsidies in absolute dollar terms whereas Q4B frames the distribution of the subsidies in terms of whether it is income-regressive or income-progressive.

### Limitations

A couple of limitations to this study ought to be noted. These stem from the fact that the original objective of the survey was not to investigate fiscal misperceptions but rather to gain an insight into the extent to which the pronatalist tax incentives are taken into account in married couples’ decisions to have children. The first limitation relates to the survey sample, which excludes, amongst others, all single persons even though findings relating to their awareness and perceptions of the tax expenditures are potentially of interest. Secondly, due to constraints imposed by the need to avoid an unduly long survey instrument, only a few questions could be devoted in the questionnaire to eliciting respondents’ perceptions of the incentives. Responses were sought on five aspects or dimensions of interest (see Section 4.3 and Table 3). However, only one question covered each dimension examined. Therefore, given the absence of multiple questions to elicit responses on the same dimension, it was not possible to assess quantitatively the reliability of the responses provided.

### Analysis and Statistical Methods

The analysis in the remainder of this paper proceeds as follows. Section 5.1 reports the extent to which respondents are aware of the existence of the pronatalist tax expenditures and examines whether such awareness is related to their socio-economic characteristics. Section 5.2 proceeds to examine whether, and to what extent, respondents are able to perceive each of the five aspects pertaining to the cost and distributive effects of the tax incentives. The analyses in Section 5.2 cover only those respondents who are aware of the existence of at least one of the two incentives. Respondents’ ability to perceive each of the five aspects is also correlated to their socio-economic characteristics.

In examining the correlation between respondents' ability to perceive the cost/distributive effects and their socio-economic characteristics, both bivariate and multivariate approaches are adopted. From a bivariate perspective, two measures of association, Cramer's V and Somer's d, are reported. Cramer's V is a symmetric measure of the strength of the association between two nominal variables. On the other hand, Somer's d provides a directional measure of the strength of the association between two ordinal variables, with respondents' ability to perceive as the dependent variable in the analysis. From a multivariate perspective, a logistic regression is run to regress the log odds of respondents' ability to perceive against various predictor variables that take into account respondents' socio-economic characteristics. The regression equations are arrived at using the backward stepwise method based on the Likelihood Ratio Test and significance levels of 5% and 10% respectively for entry and removal of variables.

Eight socio-economic variables are used as independent variables in the exploratory research:<sup>23</sup>

- GEN: Gender (female v male).
- AGE: Age (<30 v 30-39 v ≥40).
- ETH: Ethnicity (non-Malay v Malay).
- EDU: Education (non-tertiary-educated v tertiary-educated).
- Occupational-related variables, i.e.
  - OCC\_PRO (technical, clerical, sales, service, and other non-professional/managerial occupations v professional/managerial occupations).
  - OCC\_FIN (non-finance related v finance-related, e.g. accountants, finance directors, personal financial consultants, tax officers, etc.).
- TRAIN: Tax training (based on a yes/no response to the following question: "Have you ever attended any courses, whether or not as part of your formal education, which have provided you with knowledge of personal income taxation in Singapore?" The purpose of this variable is to account for any specialised knowledge that the respondent may have pertaining to Singapore personal income taxation).
- INC: Income (based on the respondent's annual income in 2000, i.e. ≤S\$24K v >S\$24K-≤S\$60K v >S\$60K. Respondents in the lowest income category are not liable to pay any income tax and generally do not benefit at all from the pronatalist tax incentives).
- BEN: Respondent's status as a beneficiary or non-beneficiary of the STR incentive (comprises three categories as follows:
  - Non-beneficiaries, i.e. respondents with annual incomes not exceeding S\$24,000 and/or those without any children qualifying for the STR incentive;

<sup>23</sup> Many of these variables are similar to those included in prior studies on fiscal knowledge and tax burden consciousness. For instance, gender and social class (defined in terms of various occupational categories) were among the background variables considered by Cullis and Lewis (1985) in evaluating the level of voter knowledge of the various sources of UK central government financing. Similarly, gender, age, education, income and occupational status were included in Schokkaert's (1988) analyses of voter knowledge and awareness of local government financing in Belgium. Gender, age and education were among the potential determinants considered by Fujii and Hawley (1988) in their study on marginal income tax rate consciousness in the US.

- Middle-income beneficiaries, i.e. respondents with annual incomes from S\$24,001 to S\$60,000 who have qualifying children; and
- High-income beneficiaries, i.e. respondents with annual incomes exceeding S\$60,000 who have qualifying children. In view of the features of the STR incentive described in Section 3, high-income beneficiaries enjoy disproportionately more tax savings than middle-income beneficiaries with the same number of children. In particular, and unlike for middle-income beneficiaries, high-income beneficiaries are able to fully utilise their statutory STR tax credits over the nine-year set-off period).

## FINDINGS

### Awareness of the existence of the pronatalist tax expenditures

Out of the 350 respondents surveyed, 275 (78.6%) claimed to be aware of the STR incentive and 264 (75.4%) of the ECR incentive. 318 (90.9%) knew of at least one of the two incentives, with the remaining 32 (9.1%) having not heard of either incentive. Table 2 presents the association between awareness of at least one of the two tax expenditures and each of the socio-economic variables.

**TABLE 2: AWARENESS OF AT LEAST ONE OF THE TWO PRONATALIST TAX EXPENDITURES BY VARIOUS SOCIO-ECONOMIC VARIABLES**

Awareness of tax incentives (No v Yes) by the following socio-economic variables:	N	Cramer's V [1]		Somers's d [2]	
		Value	p-value	Value	p-value
Gender (Female v Male)	350	.054	.314	-.032	.291
Age (<30 v 30-39 v ≥40)	341	.075	.386	.030	.314
Ethnicity (Non-Malay v Malay)	350	.096	[3] .085	-.085	.158
Education (Non-Tertiary v Tertiary)	350	.138	.010	.082	.017
Tax training (Not trained v Trained)	350	.110	.040	.087	.001
Income (≤\$24K v >\$24K-\$60K v >\$60K)	344	.089	.259	.039	.186
Occupation (Other v Professional)	329	.066	.232	.104	.189
Occupation (Other v Finance-related)	329	.050	[3] .443	.040	.284

[1] Symmetric measure of nominal-by-nominal association.  
 [2] Directional measure of ordinal-by-ordinal association, with awareness of tax incentives as the dependent variable.  
 [3] Using Fisher's Exact Test (rather than Chi-square Test) due to one cell having an expected frequency of less than 5.

Based on Table 2, tertiary-educated respondents and those who have prior training in personal income taxation are more likely to be aware of at least one incentive as compared to respondents without such education and training. There is some evidence that non-Malays are more likely than Malays to be aware of at least one incentive although this result is not statistically significant at the 5% level. Other associations, including the association with income, are not statistically significant.

### Perceptions of the cost and distributive outcomes of the pronatalist tax expenditures

For the remaining analyses in this paper, only the 318 respondents with awareness of at least one of the two pronatalist tax expenditures are included. The remaining 32 respondents without any knowledge of the existence of either incentive were excluded

because they could not logically be expected to provide any useful responses of their perceptions of the distributive effects of the tax expenditures.

#### General

Table 3 reports the numbers and percentages of respondents who are, and who are not, able to perceive the five different aspects relating to the cost and distributive outcomes of the pronatalist tax expenditures.

**TABLE 3: ABILITY TO PERCEIVE THE COST AND DISTRIBUTIVE OUTCOMES OF THE PRONATALIST TAX EXPENDITURES**

Aspect in respect of which respondent's ability to perceive is examined	N	Perceptive	Not perceptive	
		[1]	Deluded [2]	Unsure [3]
Spending implications and hidden cost of the tax expenditures (Q1)	317	87 (27.4%)	115 (36.3%) 230 (72.6%)	115 (36.3%)
Benefits enjoyed disproportionately less by Malay than non-Malay couples (Q2)	318	55 (17.3%)	115 (36.2%) 263 (82.7%)	148 (46.5%)
Benefits enjoyed more by higher-educated than lower-educated couples (Q3)	318	120 (37.7%)	97 (30.5%) 198 (62.3%)	101 (31.8%)
In absolute dollars, more benefits accrue to higher-income than lower-income couples (Q4A)	317	126 (39.7%)	18 (5.7%) 191 (60.3%)	173 (54.6%)
As a percentage of income, more benefits accrue to higher-income than lower-income couples (Q4B)	317	56 (17.7%)	61 (19.2%) 261 (82.3%)	200 (63.1%)
[1] 'Perceptive' refers to a correct response to the relevant question in Section 4.3 (e.g. for Q1, agreeing with the statement that tax incentives are provided at a cost to taxpayers), thereby suggesting that the respondent was able to perceive the aspect examined (i.e. the spending implications and hidden cost of the tax expenditures).				
[2] 'Deluded' refers to an incorrect response (e.g. for Q1, agreeing with the statement that tax incentives are provided without any cost to taxpayers).				
[3] 'Unsure' refers to a 'don't know' response.				

There appears to be widespread misperceptions (or, at the very least, ignorance) of the cost and distributive outcomes associated with the pronatalist tax expenditures. Fewer than three in ten respondents could appreciate the spending implications of the tax expenditures and the hidden (opportunity) cost of such spending. The fact that higher-income couples enjoy more tax savings in absolute dollars than their lower-income counterparts with the same number of children and in the same circumstances (a seemingly obvious point) is evident to only four in ten respondents. When asked if the

distribution of the subsidies is income-progressive or income-regressive, only 18% of the respondents knew that it is income-regressive. A higher percentage of the respondents (38%) were able to perceive the elitist slant of the tax expenditures favouring higher-educated couples. There are two plausible reasons for this relatively higher level of consciousness. Firstly, educational qualification was an explicit qualifying condition for the ECR incentive and the prescribed minimum qualification was clearly stated in Inland Revenue literature referred to by taxpayers when completing their annual income tax returns. Secondly, the very intense and, to some extent, acrimonious public debate that followed the announcement of the controversial pronatalist measures in 1984 had very much focussed public attention on the fertility imbalance between the higher and lower educated, and had highlighted the eugenic bias of the incentives. The distributional aspect least perceived is the implicit bias of the tax expenditures against Malay couples. Only 17% of respondents were perceptive of this ethnic bias, and more than double this number (i.e. 36%) were in fact deluded into thinking that Malay couples enjoy benefits commensurate with the number of children they have. The relatively low perceptibility rate is unsurprising given that the ability to perceive this aspect required respondents not only to be aware that the incentives do not favour the lower educated and the lower income, but also to be cognisant of the fact that the lower educated and lower income are disproportionately Malay.

It may also be observed that issues relating to the distribution of the pronatalist tax subsidies by income had the highest percentages of 'don't know' responses. 63% of respondents stated that they did not know whether the benefits of the tax expenditures are distributed in an income-progressive or income-regressive manner while, somewhat surprisingly, as many as 55% of respondents stated that they did not know whether higher-income couples enjoy more or less dollar savings than lower-income couples in the same circumstances.

In the remaining analyses that follow, responses relating to each aspect will be classified into two categories – 'perceptive' and 'not perceptive', with the latter category incorporating the 'deluded' and 'don't know' responses.

#### *Perceptibility of the spending implications and hidden cost*

Table 4 reports the bivariate association between respondents' ability to perceive the spending implications and hidden cost of the pronatalist tax expenditures and each of the socio-economic variables.

**TABLE 4: ABILITY TO PERCEIVE THE SPENDING IMPLICATIONS AND HIDDEN COST OF THE PRONATALIST TAX EXPENDITURES BY VARIOUS SOCIO-ECONOMIC VARIABLES**

Ability to perceive (No v Yes) by the following socio-economic variables:	N	Cramer's V [1]		Somer's d [2]	
		Value	p-value	Value	p-value
Gender (Female v Male)	317	.108	.055	.100	.046
Age (<30 v 30-39 v ≥40) [3]	309	.152	.029	.007	.857
Ethnicity (Non-Malay v Malay)	317	.104	.064	-.148	.030
Education (Non-Tertiary v Tertiary)	317	.273	<.0005	.253	<.0005
Tax training (Not trained v Trained)	317	.179	.001	.214	.005
Income (≤\$24K v >\$24K-\$60K v >\$60K)	311	.262	<.0005	.197	<.0005
Beneficiary status (Non-ben v MI ben v HI ben) [4]	312	.174	.009	.063	.239
Occupation (Other v Professional)	299	.233	<.0005	.228	<.0005
Occupation (Other v Finance-related)	299	.166	.004	.201	.011

[1] Symmetric measure of nominal-by-nominal association.

[2] Directional measure of ordinal-by-ordinal association, with ability to perceive as the dependent variable.

[3] There is no statistically significant difference in ability to perceive between respondents in age groups <30 and ≥40. However, respondents in age group 30-39 are more perceptive than those in the other age groups. The 2x2 classification (Other v 30-39) yields the following statistics: N = 309; V = .150 (p = .008); d = .135 (p = .006).

[4] There is no statistically significant difference in ability to perceive between non-beneficiaries and middle-income beneficiaries. However, high-income beneficiaries are more perceptive than non-beneficiaries or middle-income beneficiaries. The 2x2 classification (Other v HI ben) yields the following statistics: N = 313; V = .171 (p = .003); d = .270 (p = .013).

The results suggest that education, tax training, income and occupational status have a bearing on whether the spending implications and hidden (opportunity) cost of the pronatalist tax expenditures are perceived. There is also evidence to suggest a higher level of perceptiveness in this respect amongst males (compared to females), amongst respondents between the ages of 30 and 39 (compared to respondents of other ages), and amongst non-Malays (compared to Malays). However, based on results of the multivariate analysis reported below, these variables are no longer statistically significant once education, tax training, income and occupational status are controlled.

With regards to beneficiary status, the bivariate analysis suggests that high-income beneficiaries are more likely to perceive the spending and cost implications of the tax expenditures than other respondents (Note [4] in Table 4). However, when compared to non-beneficiaries on the same incomes (i.e. controlling for income), high-income beneficiaries are not significantly more perceptive (Table 5). In other words, while a high-income respondent is certainly more perceptive than a lower-income respondent due probably to a greater incentive and the means to be fiscally knowledgeable and/or due to better financial acumen, the fact that the high-income respondent is also a beneficiary of a pronatalist tax incentive does not, in itself, make him/her any more cognisant of the spending and cost implications of the tax expenditures. One does not need to be a beneficiary of a specific tax expenditure program in order to appreciate the spending implications and opportunity cost to taxpayers that characterise tax expenditure spending in general.



**TABLE 5: ABILITY TO PERCEIVE THE SPENDING IMPLICATIONS AND HIDDEN COST OF THE PRONATALIST TAX EXPENDITURES AMONGST HIGH-INCOME RESPONDENTS (INCOMES EXCEEDING S\$60,000) BY BENEFICIARY STATUS**

	<u>Non-beneficiary</u> No. (%) of high- income respondents	<u>Beneficiary</u> No. (%) of high- income respondents	<u>Total</u> No. (%) of high- income respondents
Not perceptive	26 (55.3%)	13 (48.1%)	39 (52.7%)
Perceptive	21 (44.7%)	14 (51.9%)	35 (47.3%)
	47 (100.0%)	27 (100.0%)	74 (100.0%)
Minimum expected cell frequency: 12.77			
Cramer's V = .069 (p = .552)			
Somer's d (Ability to perceive as the dependent variable) = .072 (p = .552)			

To ascertain the relative importance of the various socio-economic variables in determining respondents' ability to perceive the spending implications and hidden cost, a logistic regression was run, with the dependent variable being the log odds of being able to perceive, and the independent variables comprising the various socio-economic variables. The basis of arriving at the regression equation is as described in section 4.5 and the results are summarised in Table 6.<sup>24</sup>

<sup>24</sup> Collinearity is not a major problem in the final equation. The strongest correlation between any pair of predictor variables is that between LOW\_INC and MID\_INC (R=.389).

**TABLE 6: LOGISTIC REGRESSION – ABILITY TO PERCEIVE THE SPENDING IMPLICATIONS AND HIDDEN COST OF THE PRONATALIST TAX EXPENDITURES**

N = 288		Nagelkerke R <sup>2</sup> = .218				
<u>Likelihood Ratio Test for Overall Model:</u>						
-2LL for final model = 141.395		Chi-square = 46.605		df = 5	p-value = <.0005	
<u>Hosmer and Lemeshow Test for Goodness-of-Fit:</u>						
Chi-square = 9.369		df = 6		p-value = .154		
<u>Variables in the Equation:</u>						
	Parameter estimate	Std error	Wald	df	p-value	Odds ratio
EDU [1]	1.016	.381	7.120	1	.008	2.762
TRAIN [2]	.892	.351	6.454	1	.011	2.440
OCC_PRO [3]	.711	.301	5.563	1	.018	2.036
Income			9.514	2	.009	
- LOW_INC [4]	-1.536	.573	7.175	1	.007	.215
- MID_INC [5]	-.788	.322	6.001	1	.014	.455
INTERCEPT	-1.539	.434	12.576	1	<.0005	.215
<u>Likelihood Ratio Tests for Individual Variables:</u>						
	-2LL of reduced model	Chi-square	df	p-value		
INTERCEPT	141.395	.000	0			
EDU	149.239	7.844	1	.005		
TRAIN	147.736	6.341	1	.012		
OCC_PRO	146.907	5.512	1	.019		
Income (LOW_INC and MID_INC)	151.345	9.950	2	.007		
[1] EDU (0 = Non-tertiary-educated, 1= Tertiary-educated)						
[2] TRAIN (0 = Not tax trained, 1 = Tax trained)						
[3] OCC_PRO (0 = Other occupation, 1 = Professional/managerial occupation)						
[4] LOW_INC (0 = Other income levels, 1 = Income not exceeding S\$24,000)						
[5] MID_INC (0 = Other income levels, 1 = Income exceeding S\$24,000 but not exceeding S\$60,000)						

The results indicate that income is one of the most important variables determining respondents' ability to perceive the spending implications and hidden cost of the tax expenditures – in particular, the odds of a low-income respondent being able to perceive are a factor of only .215 of the odds for a high-income respondent, or put the other way, the high-income respondent's odds are a factor of 4.646 of the low-income respondent's odds. General education, special tax training and occupational status are the other significant determinants, whereas gender, age, ethnicity and beneficiary status are statistically insignificant when the four variables mentioned previously are controlled.

*Perceptibility of the ethnic bias*

All bivariate associations between respondents' ability to perceive the bias of the tax expenditures against Malay couples and the various socio-economic variables (except for beneficiary status) are weak and statistically insignificant. One conclusion therefore is that Malays are not significantly more, or less, likely than non-Malays to perceive that the incentives are effectively biased against them.<sup>25</sup>

The data (Table 7), however, provides some statistical support for the contention that beneficiaries are more perceptive than non-beneficiaries of the hidden ethnic bias of the tax incentives (although this association is a relatively weak one).

**TABLE 7: ABILITY TO PERCEIVE THE ETHNIC BIAS OF THE PRONATALIST TAX EXPENDITURES BY BENEFICIARY STATUS**

	<u>Non-beneficiary</u>	<u>Beneficiary</u>	<u>Total</u>
	No. (%) of respondents	No. (%) of respondents	No. (%) of respondents
Not perceptive	182 (85.4%)	76 (76.0%)	258 (82.4%)
Perceptive	31 (14.6%)	24 (24.0%)	55 (17.6%)
	213 (100.0%)	100 (100.0%)	313 (100.0%)
Minimum expected cell frequency: 17.57			
Cramer's V = .116 (p = .041)			
Somer's d (Ability to perceive as the dependent variable) = .094 (p = .055)			

*Perceptibility of the eugenic bias*

Table 8 presents the bivariate association between respondents' ability to perceive the eugenic nature of the pronatalist tax expenditures and each of the socio-economic variables. An additional variable, 'completion of married woman's tax return', has been included to take into account whether the respondent had any part in completing that section of the couple's tax return that relates to the wife. Since only the wife could be eligible for the ECR incentive and the ECR incentive had an explicit eligibility condition that related to educational qualifications, completing the married woman's tax return potentially exposes the respondent to this information and raises his/her consciousness of the eugenic bias of the incentive.

<sup>25</sup> The relevant statistics for the bivariate association between ability to perceive the ethnic bias and ethnicity are as follows: N = 318; Cramer's V = .052 (p = .356); Somer's d (ability to perceive as the dependent variable) = .062 (p = .404).

**TABLE 8: ABILITY TO PERCEIVE THE EUGENIC BIAS OF THE PRONATALIST TAX EXPENDITURES BY VARIOUS SOCIO-ECONOMIC VARIABLES**

Ability to perceive (No v Yes) by the following socio-economic variables:	N	Cramer's V [1]		Somer's d [2]	
		Value	p-value	Value	p-value
Gender (Female v Male)	318	.033	.554	-.033	.555
Age (<30 v 30-39 v ≥40) [3]	310	.187	.004	.136	.007
Ethnicity (Non-Malay v Malay)	318	.037	.508	.058	.517
Education (Non-Tertiary v Tertiary)	318	.008	.884	-.008	.885
Tax training (Not trained v Trained)	318	.218	<.0005	.282	<.0005
Income (≤\$24K v >\$24K-\$60K v >\$60K)	312	.077	.400	-.057	.241
Beneficiary status (Non-ben v MI ben v HI ben)	313	.069	.475	.007	.903
Occupation (Other v Professional)	299	.054	.350	.057	.354
Occupation (Other v Finance-related)	299	.158	.006	.207	.010
Completion of married woman's tax return (No v Yes)	316	.151	.007	.148	.006

[1] Symmetric measure of nominal-by-nominal association.  
[2] Directional measure of ordinal-by-ordinal association, with ability to perceive as the dependent variable.  
[3] There is no statistically significant difference in ability to perceive between respondents in age groups <30 and 30-39. However, respondents in age group ≥40 are more perceptive than those in the other age groups. The 2x2 classification (Other v ≥40) yields the following statistics: N = 310; V = .187 (p = .001); d = .219 (p = .002).

Based on the bivariate analyses, the variables with statistical significance at the 5% level are age (Other v ≥40), tax training, occupation (other v finance-related) and completion of married woman's tax return. Gender, ethnicity, education, income, beneficiary status and occupational status (other v professional) do not determine respondents' ability to perceive the eugenic bias of the tax incentives. Age, tax training and completion of married woman's tax return are also confirmed statistically significant from a multivariate perspective. Table 9 reports the results of the relevant regression.

**TABLE 9: LOGISTIC REGRESSION – ABILITY TO PERCEIVE THE EUGENIC BIAS**

N = 291		Nagelkerke R <sup>2</sup> = .128				
<u>Likelihood Ratio Test for Overall Model:</u>						
-2LL for final model = 47.728		Chi-square	=	df = 4	p-value = <.0005	
		28.847				
<u>Hosmer and Lemeshow Test for Goodness-of-Fit:</u>						
Chi-square = 1.743		df = 4	p-value = .783			
<u>Variables in the Equation:</u>						
	Parameter estimate	Std error	Wald	df	p-value	Odds ratio
AGE_40 [1]	.885	.301	8.652	1	.003	2.424
TRAIN [2]	.926	.350	6.975	1	.008	2.523
OCC_FIN [3]	.617	.362	2.904	1	.088	1.852
WRET [4]	.529	.261	4.115	1	.042	1.697
INTERCEPT	-1.273	.228	31.178	1	<.0005	.280
<u>Likelihood Ratio Tests for Individual Variables:</u>						
	-2LL of reduced model	Chi-square	df	p-value		
INTERCEPT	47.728	.000	0			
AGE_40	56.435	8.707	1	.003		
TRAIN	54.785	7.057	1	.008		
OCC_FIN	50.609	2.881	1	.090		
WRET	51.899	4.171	1	.041		
[1] AGE_40 (0 = Other age group, 1 = Age group ≥40)						
[2] TRAIN (0 = Not tax trained, 1 = Tax trained)						
[3] OCC_FIN (0 = Other occupation, 1 = Finance-related occupation)						
[4] WRET (0 = Did not complete married woman's tax return, 1 = Completed married woman's tax return)						

The finding that respondents aged 40 years or older are more perceptive (than younger respondents) of the eugenic bias of the tax expenditures is robust even after controlling for the other variables. There may well be a very simple reason for this. It has to be remembered that these older respondents would have been in their mid twenties to mid thirties<sup>26</sup> at the time when the controversial tax and other incentives were first introduced in the 1980s. They would have experienced and, perhaps, even participated in the intense public debate that occurred at that time. This debate had evolved mainly around the issues of eugenics and elitism. Some had disputed outright the validity of the hypothesis that intelligence and talent are primarily inherited, while many others felt strongly that, regardless of any truth in the hypothesis, it was beyond the legitimacy of government action anyway to pursue a eugenic population policy and to institutionalise a system of incentives and disincentives that breeds elitism and promotes class-consciousness. The extensive media coverage and widespread

<sup>26</sup> Respondents aged 40 in 2001 would have been 23 years old in 1984. The oldest respondents in the sample of 318 were 51 years old in 2001, i.e. 34 years old in 1984.

publicity given to the heated exchanges in the 1980s appear, more than fifteen years on, to have left an imprint on older respondents of the present survey. Respondents old enough to recall the controversies and acrimony of the mid 1980s are found to be more likely to perceive the eugenic bias of the incentives. Younger respondents to the survey would have been too young back then to appreciate or remember the controversy.

*Perceptibility of the bias in favour of the rich*

Tables 10 and 11 report respectively the bivariate associations and the logistic regression relating to respondents' ability to perceive that higher-income couples enjoy more dollar subsidies from the pronatalist tax expenditures than do lower-income couples in the same circumstances.

**TABLE 10: ABILITY TO PERCEIVE WHETHER HIGHER-INCOME COUPLES ENJOY MORE TAX SUBSIDIES IN ABSOLUTE DOLLARS BY VARIOUS SOCIO-ECONOMIC VARIABLES**

Ability to perceive (No v Yes) by the following socio-economic variables:	N	Cramer's V [1]		Somer's d [2]	
		Value	p-value	Value	p-value
Gender (Female v Male)	317	.012	.830	.012	.830
Age (<30 v 30-39 v ≥40)	309	.042	.761	.037	.459
Ethnicity (Non-Malay v Malay)	317	.105	.062	.163	.075
Education (Non-Tertiary v Tertiary)	317	.098	.080	.100	.075
Tax training (Not trained v Trained)	317	.258	<.0005	.338	<.0005
Income (≤\$24K v >\$24K-\$60K v >\$60K)	311	.071	.455	-.012	.814
Beneficiary status (Non-ben v MI ben v HI ben)	312	.122	.099	.113	.044
Occupation (Other v Professional)	298	.090	.121	.096	.125
Occupation (Other v Finance-related)	298	.223	<.0005	.296	<.0005

[1] Symmetric measure of nominal-by-nominal association.

[2] Directional measure of ordinal-by-ordinal association, with ability to perceive as the dependent variable.

**TABLE 11: LOGISTIC REGRESSION – ABILITY TO PERCEIVE THAT HIGHER-INCOME COUPLES ENJOY MORE TAX SUBSIDIES IN ABSOLUTE DOLLARS**

N = 293		Nagelkerke R <sup>2</sup> = .142				
<u>Likelihood Ratio Test for Overall Model:</u>						
-2LL for final model = 75.292		Chi-square = 32.640		df = 5	p-value = <.0005	
<u>Hosmer and Lemeshow Test for Goodness-of-Fit:</u>						
Chi-square = 2.563		df = 4		p-value = .633		
<u>Variables in the Equation:</u>						
	Parameter estimate	Std error	Wald	df	p-value	Odds ratio
ETH [1]	.720	.391	3.386	1	.066	2.055
TRAIN [2]	.989	.358	7.644	1	.006	2.688
Beneficiary status			5.167	2	.075	
- MID_BEN [3]	.453	.305	2.204	1	.138	1.573
- HI_BEN [4]	.860	.436	3.897	1	.048	2.364
OCC_FIN [5]	1.022	.365	7.856	1	.005	2.779
INTERCEPT	-1.007	.182	30.698	1	<.0005	.365
<u>Likelihood Ratio Tests for Individual Variables:</u>						
	-2LL of reduced model	Chi-square	df	p-value		
INTERCEPT	75.292	.000	0			
ETH	78.680	3.387	1	.066		
TRAIN	83.081	7.789	1	.005		
Beneficiary status (MID_BEN and HI_BEN)	80.491	5.198	2	.074		
OCC_FIN	83.255	7.963	1	.005		
[1] ETH (0 = Non-Malay, 1 = Malay)						
[2] TRAIN (0 = Not tax trained, 1 = Tax trained)						
[3] MID_BEN (0 = Other respondent, 1 = Beneficiary with income exceeding S\$24,000 but not exceeding S\$60,000)						
[4] HI_BEN (0 = Other respondent, 1 = Beneficiary with income exceeding S\$60,000)						
[5] OCC_FIN (0 = Other occupation, 1 = Finance-related occupation)						

Tables 12 and 13 report respectively the bivariate associations and the logistic regression relating to respondents' ability to perceive that higher-income couples enjoy more tax subsidies as a percentage of income than do lower-income couples in the same circumstances.

**TABLE 12: ABILITY TO PERCEIVE WHETHER HIGHER-INCOME COUPLES ENJOY MORE TAX SUBSIDIES AS A PERCENTAGE OF INCOME (I.E. THE INCOME-REGRESSIVE BENEFIT DISTRIBUTION) BY VARIOUS SOCIO-ECONOMIC VARIABLES**

Ability to perceive (No v Yes) by the following socio-economic variables:	N	Cramer's V [1]		Somer's d [2]	
		Value	p-value	Value	p-value
Gender (Female v Male)	317	.003	.962	-.002	.962
Age (<30 v 30-39 v ≥40)	309	.034	.833	.003	.947
Ethnicity (Non-Malay v Malay)	317	.022	.701	.026	.713
Education (Non-Tertiary v Tertiary)	317	.020	.727	.016	.724
Tax training (Not trained v Trained)	317	.103	.067	.105	.109
Income (≤\$24K v >\$24K-\$60K v >\$60K)	311	.193	.003	-.052	.249
[3]					
Beneficiary status (Other v HI ben) [4]	313	.127	[5] .034	.172	.077
Occupation (Other v Professional)	298	.028	.627	-.024	.619
Occupation (Other v Finance-related)	298	.050	.390	.052	.422
[1] Symmetric measure of nominal-by-nominal association.					
[2] Directional measure of ordinal-by-ordinal association, with ability to perceive as the dependent variable.					
[3] Respondents with incomes up to \$24,000 are more perceptive than those in higher income groups. The 2x2 classification (≤\$24K v Other) yields the following statistics: N = 311; V = .176 (p = .002); d = -.180 (p = .011).					
[4] There is no statistically significant difference in ability to perceive between non-beneficiaries and middle-income beneficiaries. These two groups are collapsed into one labelled 'Other' in order to obtain a 2x2 classification to which Fisher's Exact Test is applied.					
[5] Using Fisher's Exact Test (rather than Chi-square Test) due to one cell having an expected frequency of less than 5.					



**TABLE 13: LOGISTIC REGRESSION – ABILITY TO PERCEIVE THE INCOME-REGRESSIVE BENEFIT DISTRIBUTION**

N = 309		Nagelkerke R <sup>2</sup> = .083				
<u>Likelihood Ratio Test for Overall Model:</u>						
-2LL for final model = 23.494		Chi-square = 15.880	df = 2	p-value = <.0005		
<u>Hosmer and Lemeshow Test for Goodness-of-Fit:</u>						
Chi-square = .015		df = 1	p-value = .902			
<u>Variables in the Equation:</u>						
	Parameter estimate	Std error	Wald	df	p-value	Odds ratio
LOW_INC [1]	1.254	.358	12.278	1	<.0005	3.504
HI_BEN [2]	1.283	.455	7.938	1	.005	3.607
INTERCEPT	-1.976	.202	96.025	1	<.0005	.139
<u>Likelihood Ratio Tests for Individual Variables:</u>						
	-2LL of reduced model	Chi-square	df	p-value		
INTERCEPT	23.494	.000	0			
LOW_INC	34.971	11.477	1	.001		
HI_BEN	30.571	7.076	1	.008		
[1] LOW_INC (0 = Other income levels, 1 = Income not exceeding S\$24,000)						
[2] HI_BEN (0 = Other respondent, 1 = Beneficiary with income exceeding S\$60,000)						

The main findings from Tables 10 to 13 may be summarised as follows. Firstly, TRAIN and OCC\_FIN are important determinants of whether a respondent can perceive the absolute dollar distribution of the tax subsidies (Tables 10 and 11). However, neither variable is statistically significant as a determinant of the ability to perceive the income-disproportionate distribution of the tax subsidies (Tables 12 and 13). It does appear that many people do not think in income-proportionate terms when evaluating the distribution of tax subsidies, and that this is the case even for those trained in personal income taxation and/or whose work involve dealing with finance-related matters (including taxation). Secondly, there is some evidence (at the 10% significance level) that Malays are more perceptive (than non-Malays) of the absolute dollar distribution of the tax subsidies, but they are not any more perceptive of the income-disproportionate distribution of those subsidies.

Thirdly, there is no statistically significant difference between lower-income respondents and higher-income respondents with regards to their abilities to perceive the absolute dollar distribution of the tax subsidies (Table 10). However, low-income respondents (incomes up to S\$24,000) are more perceptive (than higher-income respondents in general) of the income-regressive distribution of the tax subsidies (Note [3] in Table 12; and Table 13). This may seem somewhat surprising but there is a credible reason for it. Respondents with incomes up to S\$24,000 do not pay any income tax as a result of the major tax reforms in the 1990s (described in Section 3). Regardless of the number of children they have, these respondents cannot possibly

enjoy any benefit from the pronatalist tax expenditures. Neither do they stand to gain from any other tax expenditure. By reflecting on their own obvious position (i.e. that they clearly receive no benefits through the tax system), some of these respondents are then probably able to reason that it is conceivable for the rich to enjoy multiples of the little or no tax savings that accrue to the poor. In other words, by being so obviously deprived outright of all benefits delivered through the tax system, some of these respondents probably have developed over the years a heightened consciousness of the disproportionate bias of tax incentives in general towards the rich. In contrast, higher-income respondents (incomes exceeding S\$24,000) generally are liable to pay income tax and are not automatically excluded from enjoying tax savings from the pronatalist or other tax incentives. Unlike the low-income respondents, higher-income respondents lack an obvious personal reference point that could have helped them perceive the regressive benefit distribution.

While the argument referred to above of a heightened level of consciousness amongst low-income respondents may have some truth today, it is unlikely that this was the case amongst low-income taxpayers back in the 1980s when the pronatalist incentives were being introduced. When these incentives were first introduced in the 1980s (i.e. before the tax reforms of the 1990s), virtually all working individuals in Singapore were paying income taxes and therefore very few of those targeted by tax expenditures back then would have been denied outright of at least some tax savings due to low incomes. In this regard, it is doubtful that all that many low-income taxpayers were perceptive of the income-regressive bias at the time when it mattered most during the 1980s when the incentives were announced and being debated.

A fourth and final point is that amongst high-income respondents (incomes exceeding S\$60,000), the evidence suggests that the ability to perceive the absolute dollar distribution (Table 11) and the income-regressive distribution (Tables 12 and 13) of the tax subsidies is statistically significantly greater for those who are beneficiaries of the incentives. To sum up this and the previous points, respondents who are more likely to perceive the income-regressive benefit distribution fall into one of two very distinct groups: (1) low-income respondents who, by the design of the tax incentives and the subsequent structural tax reforms, are now excluded from enjoying any benefit; and (2) high-income beneficiaries who stand to gain the most from the incentives (Table 14 summarises the position).

**TABLE 14: ABILITY TO PERCEIVE THE INCOME-REGRESSIVE BENEFIT DISTRIBUTION BY INCOME AND BY BENEFICIARY STATUS (FOR RESPONDENTS WITH INCOMES EXCEEDING S\$60,000)**

Income	<u>≤\$24K</u>	<u>&gt;\$24K to \$60K</u>	<u>≥\$60K</u>		<u>Total</u>
			<b>Non-beneficiary</b>	<b>Beneficiary</b>	
	No. (%) of respondents	No. (%) of respondents	No. (%) of respondents	No. (%) of respondents	No. (%) of respondents
Not perceptive	35 (68.6%)	159 (87.4%)	42 (89.4%)	18 (66.7%)	254 (82.7%)
			60 (81.1%)		
Perceptive	16 (31.4%)	23 (12.6%)	5 (10.6%)	9 (33.3%)	53 (17.3%)
			14 (18.9%)		
			47 (100.0%)	27 (100.0%)	
	51 (100.0%)	182 (100.0%)	74 (100.0%)		307 (100.0%)

**CONCLUSIONS AND DIRECTIONS FOR FUTURE RESEARCH**

This paper has presented the results of an exploratory study into the extent and determinants of the awareness of and perceptions pertaining to pronatalist tax policy in Singapore. While there appears to be a high level of awareness of the existence of the tax expenditures, there is widespread ignorance, if not misperceptions, of the cost and distributive outcomes of these incentives. This is so despite the over-representation in the sample of respondents who are tertiary-educated, on higher incomes and in professional/managerial occupations. Few respondents recognise the spending implications of the tax expenditures and that granting these incentives imposes a hidden cost on the majority of taxpayers who do not benefit from them. Similarly, not many respondents can perceive the predisposition of the incentives in favour of the highly educated and the rich, or the hidden bias against the Malays. This is especially true of the bias against the Malays, which is the least perceived of the three distributive biases and in respect of which the Malays themselves do not seem to be any more perceptive than respondents of other races. The overall findings of extensive ignorance and misperceptions may well be the key to explaining public acquiescence of the tax incentives and the relative lack of protest against their introduction in the 1980s when compared to the acrimonious reception given to the other, non-tax and more visibly elitist measures.

This study has not investigated directly the extent to which beneficiaries of tax expenditures are accurate in their assessments of the benefits they receive, or the extent to which non-beneficiaries misperceive the benefits received by beneficiaries. This therefore could be an opportunity for future research. However, the evidence from the present study is that beneficiaries (particularly, high-income beneficiaries who stand to gain the most) are more perceptive than non-beneficiaries of the overall distribution of the tax subsidies by income levels and, to some extent, of even the ethnic bias of the incentives. Beneficiaries are more likely to understand the distributive outcomes of the incentives than non-beneficiaries; moreover, non-beneficiaries, quite obviously, are less likely to be even aware of the existence of the

incentives. These findings highlight the potential of tax expenditures as a politically useful covert spending instrument to target and deliver benefits to a select few while ensuring that the underlying distributive effects remain relatively imperceptible to the majority.

The findings in this study also appear to illustrate the importance of public debates and media publicity in shaping public opinion on fiscal matters. The highly visible and widely reported controversies and criticisms in the 1980s of the eugenic and elitist slant of the overall pronatalist policy left a sustained impression on many of those who had experienced the episode. While the debates in the 1980s had raged on the eugenic aspects of the overall policy, with public resentment directed particularly at the primary school registration priority scheme for children of graduate mothers, specific references and objections to the income-regressive bias of the tax expenditures (which were an integral part of the overall package of policy measures introduced in the 1980s) were relatively muted. Insofar as public opinion on the distribution of tax subsidies is concerned, it is certainly the case that the overwhelming majority of people think in terms of absolute dollar savings rather than from the fiscal economists' perspective of income progressivity or regressivity. Not surprisingly then, the survey findings reveal more than double the proportion of respondents being perceptive of the absolute dollar distribution of the tax subsidies than of the distribution of the tax subsidies relative to income.

To sum up, this paper has provided empirical evidence of extensive ignorance and misperceptions associated with the cost and distributive outcomes of the pronatalist tax expenditures in Singapore. The findings are a testimony to why the tax expenditure route has proven to be a politically expedient way for the Singapore Government to implicitly pursue its policy of selective pronatalism. There is potential for more elaborate research to be undertaken in the future to investigate how such ignorance and misperceptions directly affect attitudes, preferences and support for these incentives. There is also scope for future studies, possibly experimental-based, to investigate directly whether and, if so, how benefits delivered through a tax expenditure are perceived any differently from the same benefits delivered through an equivalent direct subsidy.

## REFERENCES

- Baron J and McCaffery E J (2004), *Masking Redistribution (or its Absence)*, *University of Pennsylvania Law School, Institute for Law & Economics, Research Paper No. 04-09*
- Bittker B I (1967), A 'Comprehensive Tax Base' as a Goal of Income Tax Reform, *Harvard Law Review*, 80, 925
- Buchanan J M (1967), *Public Finance in Democratic Process: Fiscal Institutions and Individual Choice* (Chapel Hill: The University of North Carolina Press)
- COP(2001a), *Singapore Census of Population 2000 – Statistical Release 1: Demographic Characteristics* (Singapore: Department of Statistics)
- COP(2001b), *Singapore Census of Population 2000 – Statistical Release 3: Economic Characteristics* (Singapore: Department of Statistics)

- COP(2001c), *Singapore Census of Population 2000 – Statistical Release 5: Households and Housing* (Singapore: Department of Statistics)
- Collier P and R Luther (2003), The Use of Tax Regulations as Covert Political Policy Variables: A Case Study of Tax Expenditures during the Thatcher Years, *Financial Accountability & Management*, 19(2), 159-84
- Cullis J G and A Lewis (1985), Some Hypotheses and Evidence on Tax Knowledge and Preferences, *Journal of Economic Psychology*, 6, 271-87
- Cullis J G and P R Jones (1987), Fiscal Illusion and “Excessive” Budgets: Some Indirect Evidence, *Public Finance Quarterly*, 15(2), 219-28
- Dollery B E and A C Worthington (1996), The Empirical Analysis of Fiscal Illusion, *Journal of Economic Surveys*, 10(3), 261-97
- Enrick N L (1963), A Pilot Study of Income Tax Consciousness, *National Tax Journal*, 16(2), 169-73
- Enrick N L (1964), A Further Study of Income Tax Consciousness, *National Tax Journal*, 17(3), 319-21
- Francken D A (1986), Consumer Perceptions and Preferences for Public Expenditure, *Journal of Economic Psychology*, 7, 179-95
- Fujii E T and C B Hawley (1988), On the Accuracy of Tax Perceptions, *The Review of Economics and Statistics*, 70(2), 344-7
- Furnham A and A Lewis (1986), *The Economic Mind* (Hemel Hemstead: Harvester Wheatsheaf)
- Gemmell N, O Morrissey and A Pinar (2003), Tax Perceptions and the Demand for Public Expenditure: Evidence from UK Micro-Data, *European Journal of Political Economy*, 19, 793-816
- Gemmell N, O Morrissey and A Pinar (2004), Tax Perceptions and Preferences over Tax Structure in the United Kingdom, *The Economic Journal*, 114 (February), 117-38
- Gensemer B L, J A Lean and W B Neenan (1965), Awareness of Marginal Income Tax Rates Among High-Income Taxpayers, *National Tax Journal*, 18 (September), 258-67
- Hansen S (1983), *The Politics of Taxation: Revenue without Representation* (New York: Praeger)
- Hood C C (1986), *The Tools of Government* (Chatham, New Jersey: Chatham House)
- IRAS (1995), *Annual Report of the Inland Revenue Authority of Singapore*
- Lewis A (1978), Perceptions of Tax Rates, *British Tax Review*, 6, 358-66
- Lewis A (1982), *The Psychology of Taxation* (Oxford: Martin Robertson & Company Ltd)
- McCaffery E J and J Baron (2004), Framing and Taxation: Evaluation of Tax Policies Involving Household Composition, *Journal of Economic Psychology*, 25, 679-705

OECD (1996), *Tax Expenditures: Recent Experiences* (Paris: Organisation for Economic Co-operation and Development)

Oates W E (1988), On the Nature and Measurement of Fiscal Illusion: A Survey, in G Brennan, B S Grewal and P Groenewegen (eds.), *Taxation and Fiscal Federalism: Essays in Honour of Russell Mathews* (Sydney: Australian National University Press), 65-82

Page B (1983), *Who Gets What from Government* (Berkeley: University of California Press)

Pechman J A (ed.) (1977), *Comprehensive Income Taxation* (Washington DC: Brookings Institution)

Poh E H (2004), Procreation Tax Incentives and the Decision to Have a Child: A Survey of Married Couples in Singapore, *Electronic Tax and Accounting Briefing*, 5(July), 1-14

Poh E H (2005), Pronatalist Tax Expenditures in Singapore: Quantifying the Subsidies and the Disparity between Actual and Expected Subsidies, *International Tax Journal*, 31(1), 43-65

Puviani A (1903), *Teoria della Illusione Finangiaria* (Palermo)

*Report of the Royal Commission on Taxation* (1966), (Ottawa: Queen's Printer)

Salamon L M (1981), Rethinking Public Management: Third-Party Government and the Changing Forms of Government Action, *Public Policy*, 29(3), 255-75

Salamon L M and M S Lund (eds) (1989), *Beyond Privatization: The Tools of Government Action* (Washington DC: The Urban Institute Press)

Sandford C (1993), *Successful Tax Reform* (Bath: Fiscal Publications)

Sausgruber R and J-R Tyran (2004), Testing the Mill Hypothesis of Fiscal Illusion, *University of Copenhagen Economics Working Paper No. 04-18*

Saw, S H (2005), *Population Policies and Programmes in Singapore* (Singapore: Institute of Southeast Asian Studies)

Schokkaert E (1988), Fiscal Preferences and Fiscal Knowledge at the Local Level, *Journal of Economic Psychology*, 9, 29-46

Shaviro D N (1990), Beyond Public Choice and Public Interest: A Study of the Legislative Process as Illustrated by Tax Legislation in the 1980s, *University of Pennsylvania Law Review*, 139(1)

Shaviro D N (2004), Rethinking Tax Expenditures and Fiscal Language, *Tax Law Review*, 57(2), 187

Steel B and N Lovrich (1993), *Causes and Consequences of Public Knowledge Concerning State and Local Taxes*, Paper presented at the Western Political Science Association meeting, Pasadena, California, United States

- Steurle G (1995), Some Thoughts on the Status of Tax Expenditures, *Tax Notes*, 68(Jul), 485-6
- Sullivan M (2000), Tax Expenditure Budget, Now More Than Ever, *Tax Notes*, 86(Feb), 1187-8
- Surrey S S (1973), *Pathways to Tax Reform: The Concept of Tax Expenditures* (Cambridge, Massachusetts: Harvard University Press)
- Surrey S S and P R McDaniel (1985), *Tax Expenditures* (Cambridge, Massachusetts: Harvard University Press)
- The Straits Times (15.12.1986), Disaster if Sparse Birth Patterns Remain Unchanged
- The Straits Times (2.3.1987), Affordability Level Counts, not the Education Level
- Toder E J (2000), Tax Cuts or Spending – Does It Make a Difference?, *National Tax Journal*, 53(3), 361-71
- Traub S and C Siedl (1999), *Framing and Judgments of Fairness in Taxation*, available at <http://citeseer.ist.psu.edu/211022.html>
- US Department of the Treasury (1984), *Tax Reform for Fairness, Equity and Simplicity* (Washington DC: US Government Printing Office)
- Van Wagstaff J (1965), Income Tax Consciousness under Withholding, *Southern Economic Journal*, 32 (July), 73-80
- Wanna J (2003), Invisible Hands? The Non-Budgeting of Tax Expenditures in Australia and Canada, *Paper presented at the Australasian Political Studies Association Conference*
- Weisbach D A and J Nussim (2004), The Integration of Tax and Spending Programs, *The Yale Law Journal*, 113(5), 955-1028
- Winer S L (1983), Some Evidence on the Effect of the Separation of Spending and Taxing Decisions, *Journal of Political Economy*, 91(1), 126-40
- Woodside K B (1983), The Political Economy of Policy Instruments: Tax Expenditures and Subsidies in Canada, in M M Atkinson and M A Chandler (eds.), *The Politics of Canadian Public Policy* (Toronto: University of Toronto Press), chapter 8
- Woodside, K B (1986), Policy Instruments and the Study of Public Policy, *Canadian Journal of Political Science*, 19(4), 775-93
- Zelinsky, E A (1993), James Madison and Public Choice at Gucci Gulch: A Procedural Defense of Tax Expenditures and Tax Institutions, *The Yale Law Journal*, 102(5), 1165

# What Future for the Corporate Tax in the New Century?

**Richard S. Simmons\***

## ***Abstract***

It has long been recognised that the corporate tax suffers from several inherent deficiencies. However, in recent years, the transformation and integration of the world economy have exacerbated and highlighted these weaknesses, placing a question mark over the future of the tax. Through an examination of the problems besetting the tax today, a critical analysis of the conventional arguments supporting it, and a review of economic and political factors relevant to its continued existence, this article considers its future in the new century.

## **INTRODUCTION**

Today, the taxation of corporate income (“the corporate tax”) constitutes, in one form or another, part of the tax systems of nearly all nations. However, in recent years, it has come increasingly under attack. To long-standing criticisms of the tax purely in a domestic context have been added more recent complaints that it is ill adapted to a world economy that is increasingly integrated and influenced by technological change.

Recent developments have combined to make the world a smaller place. In particular, advancing globalisation and the advent of electronic commerce have increased the interdependency of individual economies. This has brought with it an increased awareness of the need to formulate new sets of rules on an international basis to govern the new global environment. International taxation is an example of an area where such regulation would be worthwhile, and in some respects, admirable progress has been made, for example on the use of tariffs and subsidies in the trade area. However, by contrast, comparatively little has been done to regulate corporate taxation. This lack of international co-ordination is at the heart of most of the problems besetting the tax today.

In view of recent global developments, the purpose of this paper is to critically review the current role and functions of the corporate tax, and, in this light, to consider its future. Indeed, a more basic question is considered of whether the tax can, or should, survive in the new century. While recently all taxes have, to one extent or another, been subject to pressures of change in fast-transforming domestic and global environments, these pressures have been applied most intensely to the corporate tax, since the corporate domain has been largely at the forefront of economic and technological changes. The future of the corporate tax is, then, important in the

---

\* Assistant Professor at the Department of Accountancy of Lingnan University, Hong Kong. Email: [simmons@ln.edu.hk](mailto:simmons@ln.edu.hk) The author gratefully acknowledges the many constructive suggestions and comments of Professor Simon James of the University of Exeter, United Kingdom.



broader issue of how the structure of individual countries' tax systems, and of the international tax system, might evolve in future.

The paper is divided into five further sections. The next section considers recent criticisms of the tax, and why these have become more pronounced in recent years. The paper then discusses why, in spite of these complaints, the tax remains widely in use. It does this by analysing the more conventional justifications put forward for its existence and then considering further explanations for its durability. The future of the tax is then considered, while a final section concludes.

## THE CORPORATE TAX UNDER ATTACK

Recent economic, political and technological developments have provoked renewed criticisms of the corporate tax. These criticisms are now outlined in turn.

### **Allocational Issues Across Jurisdictional Boundaries**

When companies operate in more than one taxing jurisdiction, the question is raised of how to allocate the profits raised between those jurisdictions. In particular, policies and practices need to be established on how to charge transfers of physical goods, services and intangible property between business units within a multinational group (transfer pricing). Over time, an international consensus has been built up, establishing the "arm's-length principle" for transfer pricing, i.e. that intra-group transactions should be priced as though they were being transacted by independent persons. This international consensus culminated in the OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations in the mid-1990s, since when they have been regularly updated.

This consensus is now under great strain, for several reasons. First, the sheer volume of international intra-firm transactions is providing an enormous challenge to the regulatory efforts of national tax authorities.<sup>1</sup> Second, the operations of multinational enterprises (MNEs) are becoming more integrated. When the various functions involved in international operations (for example, trading, risk-management, funding, marketing, administration, etc.) need to be factored into transaction prices, traditional methods of ascertaining these prices are no longer adequate (Doernberg and Hinnekens, 1999). Third, MNEs are becoming more service-oriented, and are relying more on intangibles such as brands and intellectual property to create wealth. These are difficult to price. Finally, as mentioned by Owens (1993), these highly integrated companies are increasingly able to take advantage of economies of scale, making price comparisons with unrelated parties increasingly inappropriate.

Because of these developments, the arm's-length consensus is now in danger of breaking down. If it does so, the world may be left with what many consider to be a second-best alternative, such as the unitary or arbitrary formula approach to income allocation, or indeed no consensus at all.<sup>2</sup>

---

<sup>1</sup>According to Eden (1998), intra-firm transactions at the international level account for almost fifty percent of trade for industrialised countries.

<sup>2</sup>Under the unitary approach, the allocation of profits earned in more than one jurisdiction depends not on the source of the profits, nor on the residence of the head office, but on the application of a pre-determined formula to world profits. It is widely considered to have serious deficiencies in allocating profits (see for example Weiner, 2001). Conversely, for arguments in support of this approach, see for example Tyson (1996).

**Problems Posed by Electronic Commerce**

Electronic commerce compounds the problem of income allocation mentioned above. E-commerce enables MNEs to further integrate their operations, making it difficult for tax authorities to identify and measure contributions to profit and allocate them to different jurisdictions. This problem is augmented by the often unique features of electronic contributions to profit, which make it difficult to determine their economic value.

Further, as mentioned by Warren (2002), the growth of the Internet and of secure global company-based intranets has enabled companies to shift profits more easily from one tax jurisdiction to another to avoid tax. The lack of a secure and verifiable audit trail makes it difficult for tax authorities to identify transactions and trace where they take place, expanding the scope for both tax avoidance and evasion.

The advent of e-commerce creates an even more fundamental problem for the administrators of the corporate tax. Commonly, companies that are held to be resident in a country are taxed on their worldwide income. Non-resident corporations are normally subject to tax in that country only if their operations constitute a “permanent establishment” there, and then only on domestically-sourced income. Thus the concepts of residence, permanent establishment, and the source of income are essential in the assessment of income to tax. However, with the borderless technology of the Internet significantly reducing the relevance of geographical considerations, the above concepts have become increasingly obsolete (indeed, the advent of e-commerce puts the entire traditional concept of jurisdiction to tax into question). In particular, there is a growing need for a new international consensus on the definition of a permanent establishment, although some headway has been made on this by the OECD.<sup>3</sup>

A final problem that electronic commerce creates for the corporate tax concerns the characterisation of income. A further international consensus has been built in that the nature of the income in question determines the extent and form of the tax applied to it. In particular, royalty income is commonly taxed through withholding taxes in the source country when the payment is made to the non-resident. Sales income, on the other hand, is normally taxed as profits in the country where the seller is resident or has a permanent establishment (see Ho et al., 2004). Electronic commerce blurs the already hazy distinction between these two types of income. For example, if a digital product is purchased over the Internet, does the consideration involved constitute income from sales or is it a royalty from the right to use or for the use of the product’s copyright? The difficulties involved in providing a definitive answer to this question allow considerable opportunity for tax avoidance.<sup>4</sup>

**Distortions to the Optimum Global Allocation of Resources**

The tax systems of individual countries, almost without exception, have developed primarily to address domestic concerns, such as the redistribution of income and

---

<sup>3</sup>See “Clarification on the Application of the Permanent Establishment Definition in Electronic Commerce: Changes to the Commentary on the Model Tax Convention on Article 5”, OECD Committee on Fiscal Affairs (December 2000).

<sup>4</sup>On this issue, the OECD has again been active in trying to form an international consensus. See “Tax Treaty Characterisation Issues arising from E-commerce”, Report of the Technical Advisory Group on Treaty Characterisation of Electronic Commerce Payments to Working Party Number 1 of the OECD Committee on Fiscal Affairs (February 2001).

wealth, the macro-economic stabilisation of the economy, and the allocation of productive resources within the economy. Like any tax, the level at which the corporate tax is imposed in a country is therefore a reflection of the political, economic and social realities of that nation. Thus, as corporate taxes were introduced throughout the world, tax differentials between countries inevitably materialised. Although individual countries' tax systems have always affected and been affected by other economies, policy makers usually paid little attention to international tax differentials, as their effects were comparatively insignificant. Now, with the removal of non-tax barriers to investment and the integration of national economies, and the resultant increase in the mobility of international capital, corporate tax differentials are much more consequential, as they have an increasingly important role in determining the level and destination of foreign direct investment (FDI) (see, for example, Ruding, 1992; Baker and MacKenzie, 2001).

International corporate tax differentials, through their influence on investment location decisions, disrupt the optimum allocation of resources and reduce economic efficiency. This misallocation of resources is at the expense of the comparative advantage of countries in production and trade (see Ricardo, 1819), and leads to diminished world capital productivity and reduced levels of global output. Corporate tax differentials therefore pose an efficiency problem to the world economy as a whole.<sup>5</sup>

Since this was first recognised as a growing problem, two alternative solutions have been put forward. The first of these maintains that co-ordinated inter-governmental action can effectively remove tax differentials by aligning tax levels. However, while efforts to achieve such co-ordination have been made for many years, in particular in the European Union (EU), progress has been very slow and, so far, small. Obstacles to progress are numerous and varied in nature, and include, for example, the need to harmonise the level and composition of government expenditure as well as taxation if investment distortions are to be removed, the economic upheaval involved in coordination to companies and to economies as a whole, and the effect of international coordination on the distribution of tax revenues amongst countries. Especially important is the jealousy with which individual states cling to their sovereignty on matters of taxation (one of the very few areas in EU law where unanimity is required to pass legislation).<sup>6</sup>

According to the second school of thought, co-ordination between governments is not necessary, as the problem of tax differentials is self-correcting. As countries compete for investment from overseas, these differentials are reduced through a process of international tax competition. Competitive pressures will force the "prices" of investing in countries, i.e. taxes, together. In other words, countries will spontaneously harmonise their tax systems or face the loss of international investment and the disadvantages this brings.<sup>7</sup> Recent studies suggest that some spontaneous harmonisation is indeed taking place. Using data from nineteen developed economies

---

<sup>5</sup>For an alternative view, that tax differentials can be beneficial, see for example Cnossen (1990).

<sup>6</sup>For a further discussion of the many difficulties involved in corporate tax harmonisation in the EU, see for example James (2000).

<sup>7</sup>These potential disadvantages can nowadays be severe; investment inflows from overseas have been growing in significance to the economic health of individual countries. According to UNCTAD (2001), global inward FDI flows as a percentage of gross fixed capital formation nearly tripled between 1997 and 1999, rising from 5.9% to 16.3%.

over the period 1982 to 2003, Simmons (2006) showed that the dispersion of statutory corporate tax rates fell by approximately one-third, while similar results were recorded for effective tax rates.

Nevertheless, recent evidence on effective tax rates (Baker and McKenzie, 2001; European Commission, 2001) suggests that international tax differentials currently remain high and represent a strong incentive for companies to choose the most tax-favoured locations for their investments. If tax competition is reducing distortions to investment, it clearly still has some way to go. Also, there are conceptual problems on relying on tax competition to reduce distortions to investment. As Musgrave and Musgrave (1990) argue, there is no clear theoretical backing for the supposition that tax competition will eventually result in a more efficient allocation of resources through reducing tax differentials. An equally likely scenario is that tax competition will foster a climate in which countries aim to attract capital through being tax-efficient rather than being least-cost locations, leading to greater rather than less distortion.

### **Distortions to Corporate Capital Structure**

The corporate tax has long been criticised in that it favours one kind of finance (interest-paying debt) over another (shareholders' equity), since debt interest is usually deductible in the calculation of taxable profits, whereas dividends are normally not.<sup>8</sup> The separate tax treatment of debt and equity capital creates a tax-induced distortion to the optimum capital structure of corporations, since the tax confers a benefit onto the raising of funds through debt. This distortion also raises corporate risk, as it increases the chances of excessive gearing and bankruptcy.<sup>9</sup>

More recently, the distinction in the treatment of debt and equity has resulted in artificial investment forms that can be classified as debt but have the desired characteristics of equity (Cooper and Gordon, 1995). The difficulties that this situation has created have in recent years been exacerbated by the development of derivatives and other financial instruments that make the distinction between debt and equity much less clear than in the past. As Alworth (1998, p.512) explains:

“The tax systems of most countries are wont to subdividing transactions into particular categories which are then subject to specific provision... Since derivatives and other financial instruments allow easy modification of the external attributes of financial arrangements (transforming dividends into interest payments for example through the lending of securities) these separations have become increasingly arbitrary.”

As a result of these innovations, differences between countries' tax rules permit wide opportunities for international tax arbitrage. For example, a corporation might benefit from a receipt being treated as a dividend in one jurisdiction while claiming an interest expense deduction for the corresponding payment in another (see Citron, 2002).

---

<sup>8</sup>A few countries, however, use a dividend deduction system.

<sup>9</sup>The distinction between debt and equity brings into question the very nature of the corporate tax base. Since interest on debt capital is deductible, the corporate tax does not represent a tax on the profits of a corporation before taking into account a return on capital employed. But also, since no country currently gives an allowance against tax for a "normal" return on equity, the corporate tax cannot be said to capture the "pure" profits of a corporation (that is, its income in excess of the remuneration of all factors of production, including capital). It is therefore not easy to define conceptually what the tax exactly seeks to capture.

### **The Corporate Tax and Equity**

There are two issues involved with regard to the fairness of the corporate tax. The first of these concerns the effective incidence of the tax, the second the problem of international double taxation.

The first issue rests upon the perception that a company per se cannot bear tax: only individuals can do so. Tax on corporate profits will thus ultimately be borne by the individual stakeholders in the company. Customers may bear the tax through an increase in the prices they are charged, the extent of the increase depending upon the degree of imperfection in competitive conditions. Employees may bear the tax through a reduction in their remuneration or an increase in unemployment, depending on the degree of imperfection in the labour market. Suppliers of capital may suffer the tax due to a reduction in the returns they are willing to accept. However, in a completely open economy, suppliers of capital will require the “world rate of return” or they will invest their money elsewhere. In this scenario, the corporate tax cannot reduce investors’ returns below that world rate, but can only lead to a decrease in the amount of capital they invest (see Bond et al., 2000, p.23). Therefore, in a small open economy with few barriers to foreign investment, the incidence of the tax is likely to be borne completely, or at least more heavily, by providers of labour (and perhaps by consumers) than by the suppliers of capital. If it is assumed that, in general, shareholders tend to come from more affluent sections of society than those who do not own shares (although this too may be changing), the effect of the rising international mobility of capital is to make the tax increasingly regressive.

In practice, then, the ultimate incidence of the corporate tax depends on how the tax burden levied on corporate profits is redistributed onto their various stakeholders. As this will vary by company, by industry, and by country, depending upon the elasticity of demand for the product and the elasticity of supply for capital and labour, the incidence of the tax throughout an economy is hard to predict (see Musgrave and Musgrave, 1989). Although this uncertainty is not necessarily inequitable in itself, it is likely to confound government attempts to distribute the tax burden in a manner which is considered fair.

A second issue concerns the double taxation of income. Most countries tend to adopt tax systems that include taxes on the incomes of both companies and the shareholders of those companies. This leads either to double taxation on distributed profits or the necessity to avoid this by introducing technically complicated systems such as imputation.

Under the “classical” system, currently pertaining in, for example, Switzerland, company profits are taxed at the corporate level and then at the individual level when distributed. As no credit is given to the shareholders for tax suffered at the corporate level, this system results in double taxation. If one sees a company as being merely a conduit for income as it makes its way to its owners, then, in principle, there is little justification for taxing distributed profits at the corporate level. From this viewpoint, the corporate tax acts merely as a huge withholding tax on distributions, collectable at a convenient stage for the government.

Imputation systems represent one common way of relieving double taxation. Under these systems, part or all of the corporate tax charged on dividends is imputed to shareholders against their personal income tax liability on such dividends. However, the growing international dispersion of share ownership has accentuated a deficiency

of these systems. A fully neutral treatment of investment income requires that countries not discriminate between domestic and foreign shareholders by denying to the latter the tax credit that the imputation system provides. Nonetheless, in practice there is a natural strong reluctance to grant foreign shareholders the tax credit, as it would have to be given by a different tax authority from the one levying the corporate tax. Thus imputation systems disfavour the foreign ownership of share capital. In times when the ownership of corporations was mostly domestic, this aspect of imputation did not constitute a major problem. Now, with the diffusion of share ownership throughout the world, the inequity of this situation is more apparent. In the EU, the European Court of Justice has recently ruled this aspect of imputation incompatible with single market freedoms.<sup>10</sup> This has recently resulted in many countries, such as the UK, moving away from imputation, generally towards some form of shareholder relief system. Some countries, for example Ireland, have reverted to the classical system, with its attendant double taxation implications for shareholders in those countries.

As the above analysis suggests, recent economic and technological developments have transpired to accentuate and draw attention to the inherent weaknesses of the corporate tax. In light of this, it is useful to review the justifications that have been traditionally put forward for the tax. These are identified and critically analysed in the following section.

#### **EMERGENCE OF AND CONVENTIONAL JUSTIFICATIONS FOR THE CORPORATE TAX**

The first taxes specifically on corporate income were introduced by individual states of the US in the mid-19th century. A federal tax on corporate profits was introduced in the US in 1909. In the UK, incomes, including the profits of societies and corporate entities, were first taxed under the Income Tax Act of 1799. Excess Profits Duty was introduced in 1915, representing an additional tax on company profits to that already imposed upon individuals' income from capital. This duty was replaced in 1920 by Corporation Profits Tax.<sup>11</sup> In the early years of the 20th century, many countries began a process of moving away from their traditional indirect tax base towards direct taxation. As a consequence of this movement, the corporate tax spread rapidly to other nations, until today it is almost universally applied in the developed world.

The original rationale for the introduction of the new tax was that companies were, as they are now, separate legal entities from their owners (whose liability is limited to the sums they invest in the enterprise), with the right of perpetual independent existence, and the right to sue and be sued (Oates, 2002). Thus if individual persons were subject to taxation on their income, it was considered reasonable that corporate persons should also be so. From the outset, then, a separate corporate tax was felt to be justified in that it was perceived as the price to pay for the privilege of incorporation with limited liability (James and Nobes, 2003).

However, it is not clear why being granted the legal privilege of limited liability is an appropriate justification for the taxation of company profits, or, more specifically, why the benefits of incorporation should be thus considered proportional to those profits (see, for example, Kay and King, 1991; OECD, 1991). It has been suggested that a

---

<sup>10</sup>The *Metallgesellschaft Case* (C-397/98) and the *Hoechst Case* (C-410/98), 2000 (joined cases).

<sup>11</sup>For a more comprehensive history of corporate taxation in the US and the UK, see Harris (1996).

licence fee would be more appropriate (Krever, 1985; James and Nobes, 2003). Indeed, the first business income taxes mentioned earlier evolved from licenses and were flat fees. In any case, it can be argued that incorporation already comes with a price: in the statutory audit and information dissemination requirements.

A further rationale for the corporate tax is that, as it gives the government more flexibility with regard to fiscal policy, it is potentially useful as an additional tool in macro-economic stabilisation. Indeed, this role may even have strengthened recently in some countries, as a result of restrictions on the use of alternative stabilisation strategies.<sup>12</sup> However, it has long been recognised that corporate tax policy is something of a blunt and slow-acting instrument with which to regulate the economy. Not only is it subject to the usual time lags involved in fiscal policy, but it is also normally collected well in arrears (James and Nobes, 2003). Also, the corporate tax is nowadays less suited to a role as a domestic macro-economic stabiliser than, say, the individual income tax, since its level is highly influenced by tax levels overseas due to competition for mobile capital.

It is also argued that the tax prevents the possibility of individuals shifting their earned personal income into corporate income, thus avoiding tax. Securing government revenue in this way would, on the face of it, appear to be an important function of the corporate tax. Gordon and MacKie-Mason (1995) go as far as to say that

“...the primary role of the corporate tax appears to be as a backstop to the personal tax on labour income rather than as a tax on the return to capital invested in the corporate sector.”

However, the type of tax avoidance activity mentioned above can and has been successfully countered in several countries through the introduction of specific anti-avoidance provisions, although such legislation necessarily complicates the tax system.<sup>13</sup> At any rate, to rest the case for an entire tax on the inability of another to counter abuse is less than convincing.

The underlying argument here for the corporate tax is that, in its absence, while the individual income tax system would capture corporate income distributed as dividends, retentions would remain untaxed. It is true that in practice no country attempts to fully impute corporate profits to shareholders.<sup>14</sup> However, retained profits can be, and commonly are, taxed in other ways. For example, capital gains taxes (or, eventually, death duties) eventually capture retained profits through the increase in the capital value of the shares upon disposal (or death). Thus this argument for the tax is merely that it prevents the deferral (as opposed to the avoidance) of the tax liability on retained profits.<sup>15</sup>

It is further argued that the tax gives those countries hosting the inward investment the ability to tax corporate income originating on their territory, even (and especially) if the corporation is foreign-owned. In its absence, the income of foreign shareholders

---

<sup>12</sup>In the EU, monetary union and the use of a common currency have meant that to a large extent many member states have surrendered their ability to control their economies through exchange rate and monetary policy. This is on top of earlier surrender of control over tariff and trade policy.

<sup>13</sup>Examples include “service company” legislation in Hong Kong.

<sup>14</sup>An exception to this is the system for “S” Corporations in the US, where a partnership election for certain clearly defined companies is allowed if all shareholders agree.

<sup>15</sup>Admittedly, such deferral, if over long periods, is likely to be distortionary.

would not be captured by the domestic tax system. The international tax system has over the years evolved whereby the right to tax active business income is given primarily, or at least first, to the host country (by contrast, the right to tax passive, non-business income is normally granted to the residence country). The recent overall rise in the importance of FDI to the health of individual economies has arguably made this rationale for the tax of greater significance.<sup>16</sup>

Certainly, the host country has a reasonable claim to tax company profits originating on its territory, since it is providing cost-reducing services to the corporate sector. Examples of these are the provision of infrastructure, the basic education of the workforce, or the provision of security through police force and armed services. But does this justify the existence of the corporate tax? It is difficult to discern a clear relationship between the benefits to a company of public services and the corporate taxes that the company pays. Also, the host country is likely to gain from foreign investment in ways other than tax revenue, such as the creation of employment for the local population. Perhaps most importantly, there are alternatives to the corporate tax; the host country government can, and usually does, take its “cut” from the profits of the foreign-owned company through other means, such as withholding taxes on dividends and other transfers overseas, excise duties or payroll taxes.<sup>17</sup>

Taken as a whole, then, the conventional theoretical arguments in favour of the corporate tax, while relevant, are not entirely convincing. This suggests the existence of further reasons for the tax’s durability. These are considered in the next section.

#### **REASONS FOR THE DURABILITY OF THE CORPORATE TAX**

Two further considerations support the continued existence of the corporate tax: the importance of the government revenues it produces and the political difficulties involved in its abolition.

For an understanding of the importance of corporate tax revenues to governments, these revenues are displayed as a percentage of total tax revenues and of GDP in Table 1 below. The table shows these percentages at five-year intervals from 1980 to 2000 and for 2002 for the fifteen (pre-enlargement) EU member states as a whole (EU15), and for the OECD as a whole.

---

<sup>16</sup>For an indication of the importance of these flows, see footnote 7 above.

<sup>17</sup>Although these forms of taxation have, like the corporate tax, been much criticised as distortionary.



**TABLE ONE: EU15 AND OECD REVENUES FROM CORPORATE TAXATION AS A PERCENTAGE OF TOTAL TAX REVENUES (TTR) AND AS A PERCENTAGE OF GDP (1980-2002)**

	<u>EU15</u>		<u>OECD</u>	
	%TTR	%GDP	%TTR	%GDP
1980	5.8	2.1	7.6	2.4
1985	6.4	2.6	8.0	2.7
1990	6.8	2.6	7.9	2.7
1995	6.9	2.7	8.0	2.9
2000	9.2	3.8	9.7	3.6
2002	8.6	3.5	9.3	3.4

Source: OECD Revenue Statistics (2005)

For the EU15, tax revenues from corporate profits as a percentage of total tax revenues rose from 5.8% in 1980 to 8.6% in 2002, an increase of nearly one half. For the OECD, the percentage also rose, from 7.6% to 9.3%, an increase of approximately one-quarter. Tax revenues from corporate profits as a percentage of GDP show a similar story, with the increases for the EU15 and OECD being roughly two-thirds and two-fifths respectively. In all cases, the increases were continuous between 1980 and 2000, with a small decrease being recorded between 2000 and 2002.

Corporate tax revenues thus in general constitute a significant, and (at least until recently) increasing, proportion of total tax revenues and GDP. Abolishing the corporate tax would, then, deprive governments of a useful source of revenue, and thus is likely to be strongly resisted. In some individual countries, this proportion is far larger than the EU or OECD averages, such as for Luxembourg (20.5% of total revenues and 8.6% of GDP in 2002) and for Australia (16.8% and 5.3%). The abolition of the tax would likely meet with even firmer resistance in these countries.

Revenues from the corporate tax are important today for another reason. Many developed economies, in particular Japan and certain Western European states, currently face intensifying budgetary crises due to a rapid ageing of these countries' populations. This phenomenon is leading to difficulties for governments in fulfilling their public retirement promises and to increases in health and social care spending. At the same time, countries' tax bases are being reduced, as the population of working age declines. Other issues that will put pressure on governments for increased public expenditure include environmental concerns and, more recently, measures to counter terrorism. It would be extremely difficult in times of present and future budgetary exigency to convince governments that a major source of public revenue should be discontinued. This is in spite of the fact that if the tax were abolished, governments would likely recoup at least some of this foregone revenue through subsequent increases in receipts from capital gains taxes (through increases in share prices) and personal income taxes (through increased dividend income). Corporate investment is also likely to be enhanced, with subsequent indirect benefits for the government exchequer, through, for example, greater employment.

A second reason for the tax's longevity is its degree of support from the general population. Such support rests on the belief that it redistributes income within society, since the tax is seen as being borne by affluent shareholders. However, there are problems with this belief. Share ownership has become more diffused across society, at least in developed countries, and is now hardly the sole province of the rich.

Further, the redistributive consequences of the corporate tax may well be misperceived. Indeed, as mentioned earlier, the effective incidence of the tax may now fall more on labour (through lower wages and/or unemployment) and consumers (through higher prices) than on the owners of capital. Nonetheless, it is likely that this transfer of the tax burden is not fully appreciated by the non-investing general public. The corporate tax is therefore to some extent “hidden”, and as such is comparatively attractive to governments who, sensitive to the views of their electorate in matters of taxation, have always been keen to “pluck the goose with the least amount of hissing”.

Also, to the person in the street, it appears reasonable to tax corporations. They benefit from public expenditure, such as the provision of infrastructure. They are entities that have an important effect on society and on the lives of individual citizens. Indeed, companies, especially MNEs, are seen by some as being overly powerful and answerable to no one. Further, as the tax has been a part of nearly all developed economies for many years, its existence today is widely taken for granted. In addition to these existing preconceptions, the abolition of the tax would certainly result in windfall gains for those who bought shares at prices that at the time reflected the expectation of the continued existence of the tax (James and Nobes, 2003). It is likely that these gains would not be widely appreciated by the general public. Thus, the tax’s removal is likely today to appear unacceptable, if not perverse, to a large section of the electorate.

In sum, then, the tax’s continued existence is likely to be explained less by conventional justifications, but rather by the more prosaic considerations of revenue generation and political risk-avoidance. Indeed, it is telling that, to date, no government that has introduced the tax has ever repealed it.

## THE FUTURE OF THE CORPORATE TAX

The above analysis suggests that recent criticisms of the corporate tax have been heightened by the increased interdependency of nations’ economies. Any effective solution would thus require an orchestrated international response. The most radical solution that has been put forward is the worldwide abolition of the tax.<sup>18</sup> Certainly, such a bold international initiative would remove at a stroke most of the concerns referred to above. However, given the economic and political difficulties confronting any individual government’s attempt to repeal the tax, and in light of the unsuccessful attempts at international co-ordination of corporate taxes to date (after all, worldwide abolition represents an extreme form of co-ordination), any solution along these lines must, in anything but the long term, be considered remote.<sup>19</sup>

Nonetheless, it might well be the case that if a major participant in the world economy decided to take it upon itself to be the first to abolish the tax, others may be willing to follow suit. This would more likely be the case if the move resulted in attracting significant amounts of investment away from them and reducing the viability of their

---

<sup>18</sup>The Economist Newspaper has consistently advocated abolition of the tax. See, for example, in The Economist, “Taxes for Corporate Europe”, 21st March 1992, and “Time to Hiss: A Bad Tax whose Time has Gone”, 31st January 2004. Abolition of the tax has been considered in the past in several individual countries, for example in the UK by the Meade Committee (Meade, 1978).

<sup>19</sup>Any such solution would also, for equity reasons, need to take into account the policy consequences for the taxation of the profits of non-incorporated businesses (Citron, 2002).

own corporate tax regimes. It is of course highly likely that in such a scenario the “first mover” would be very attractive as a haven to park paper profits.

There are currently two potential candidates for the role of first mover: the EU and the US. Take first the EU. A central feature of the EU’s approach to economic integration has, since its founding, been the principle that the allocation of productive resources should not be distorted by the actions or policies of individual governments. The abolition of corporate taxation would certainly represent a complete, albeit radical, solution to such distortion.<sup>20</sup> While the EU thus has a clear incentive to abolish the tax within its borders, there are serious practical obstacles to this becoming a reality. The EU is of course composed of individual states, each, as mentioned earlier, with their own veto on matters relating to taxation, and so the seemingly intractable problems mentioned earlier in obtaining agreement would apply. The failure of all the European Commission’s proposals to date on the approximation of corporate taxes in the EU attests to the very low likelihood of their abolition within that bloc.

The US is a potential first mover simply because the debate in that country is at a more advanced stage than elsewhere. As alternatives to the present corporate income tax, two variants of an expenditure tax were heavily promoted within the US Congress during the 1980s and 1990s, although neither reached the statute books. The debate shows no signs of flagging. In March to June 2004, the House Majority Leader made a series of speeches in Congress on radical tax reform, including the idea of a national sales tax to replace the corporate tax.<sup>21</sup> The high level at which the debate is continuing in the US suggests that if any worldwide movement to eliminate the corporate tax is forthcoming, it could well originate in that country.

Notwithstanding the above, the demise of the corporate tax seems unlikely in the foreseeable future. How then is it likely to evolve in the 21st century? One likely development is that costs of tax enforcement and compliance will continue to rise. In recent years, the complexity of enforcement and compliance has increased dramatically, in particular concerning cross-border investment, with transfer pricing and controlled foreign company (CFC) anti-avoidance provisions being introduced in several countries and strengthened in others. Such developments are likely to further increase costs in terms of personnel and time for both companies and tax administrators.

A consequence of these pressures is that in future tax authorities may be more amenable to international measures aimed at improving international exchanges of information. In this regard, new communications technology, often viewed with trepidation by tax administrators, may become an important ally. Progress in international information exchange has already been made. The OECD has issued a Model Agreement on Information Exchange (OECD, 2002), which strengthens exchange of information powers over those traditionally contained in bilateral tax treaties. Also, tax havens, under pressure from developed country institutions such as the OECD and the EU (see discussion on tax competition below), have, apart from a

---

<sup>20</sup>For discussions on the abolition of the corporate tax in the context of the European Union, see for example Gammie (2001).

<sup>21</sup>*Tax Notes*, 5<sup>th</sup> July 2004, p.8.

few recalcitrants, agreed to reduce their traditional reliance on secrecy and to exchange information with developed nations under certain conditions.<sup>22</sup>

Developments have also taken place in response to the need for an increasingly co-ordinated response to the problem of allocating income between jurisdictions. In 1990, the EU instituted its Arbitration Convention, which provides an independent mechanism for resolving transfer pricing disputes that result in double taxation. This could well be used as a model for international arbitration in a more global sphere. Also, the use of Advance Pricing Agreements (APAs), in which MNEs and relevant tax authorities agree in advance on transfer pricing methodology, has been rapidly expanding in recent years. This process is likely to continue. Looking further into the future, there is currently discussion of the establishment of a World Tax Organisation on the lines of the World Trade Organisation, which would, amongst other roles, provide a forum for the arbitration of international tax disputes (see for example, Sawyer, 2004).

The above developments notwithstanding, the future of the tax will more fundamentally depend on whether it can continue to justify its existence in terms of generating government revenues. As shown above, these revenues have been maintained, and have even increased, in recent years. But will this continue to be the case in future?

In the last quarter of a century, corporate tax reform has been characterised by a decrease in statutory tax rates in many countries (see for example Singleton, 1999; Wunder, 1999; Devereux et al., 2002). This has been due to important trends in politics and economics, such as the election of more “business-friendly” governments and the associated movement towards supply-side economics that has encouraged reductions in marginal tax rates to boost productivity. It has also likely been due to increased international tax competition for investment and paper profits.

Table 2 shows movements in statutory tax rates and a commonly used measure of effective tax rates, the Effective Marginal Tax Rate (EMTR)<sup>23</sup> at 10-year intervals from 1983 to 2003. The table shows data for selected countries and the average for nineteen OECD countries (comprising the G7, all pre-enlargement EU member states excluding Denmark and Luxembourg, plus Australia, Norway and Switzerland). The data are provided by the Institute for Fiscal Studies (IFS).<sup>24</sup>

---

<sup>22</sup>All but five tax havens have now committed to cooperate with the OECD with regard to improving transparency and information sharing. For a history of this OECD initiative, see, for example, Spencer (2004). The OECD regularly issues Progress Reports on its initiative. For the latest of these, see OECD (2006).

<sup>23</sup>The EMTR represents the tax rate that applies to a marginal investment project, i.e. it summarises the impact that taxes have on a project that just earns the minimum required rate of return after tax.

<sup>24</sup>Data available online from the IFS at [www.ifs.org.uk](http://www.ifs.org.uk).

**TABLE TWO: CORPORATE TAXES: STATUTORY<sup>1</sup> AND EFFECTIVE MARGINAL TAX RATES (EMTRS)<sup>2</sup>: OECD SELECTED COUNTRIES (TEN YEAR INTERVALS, 1983-2003)**

	<u>Statutory Rates</u>			<u>EMTRs</u>		
	1983	1993	2003	1983	1993	2003
	%	%	%	%	%	%
Australia	50	33	30	32	21	24
Belgium	45	39	34	31	26	22
Canada	44	35	36	16	25	25
France	50	33	35	26	18	22
Germany	63	58	40	43	38	30
Japan	55	51	41	42	38	29
Portugal	55	40	33	48	24	19
USA	50	39	39	22	24	24
OECD 19 (mean)	48	36	33	28	23	20

Notes:

- 1) Statutory rates are on undistributed profits. For individual countries where the tax rate depends on the type of industry, the manufacturing rate is used. The rate includes local taxes (or average across regions) where they exist. Supplementary taxes are included only if they apply generally.
- 2) EMTRs calculated on the following assumptions: investment is in plant and machinery, financed by equity or retained earnings; depreciation at 12.5%; common inflation rate of 3.5%; real interest rate at 10%; no personal taxes.

Source: IFS

Statutory tax rates decreased markedly in most countries between 1983 and 1993. This steep decline reflects the flurry of tax reform that took place in the late 1980s, following the first moves to reduce rates in the UK and the US. The more moderate falls (and, in some cases slight increases) between 1993 and 2003 reflect a period of comparative consolidation in most countries, although France and Germany are still in the throes of their corporate tax reforms. Between 1983 and 2003, the average rate for the nineteen OECD countries fell from 48% to 33%, a drop of nearly one-third. In that period, seventeen out of the nineteen countries reduced their rates, while only two increased theirs.

Effective tax rates followed a similar pattern to movements in statutory rates, falling markedly between 1983 and 1993, and then more moderately (or in some cases rising slightly) between 1993 and 2003. Over the entire period, the average rate fell from 28% to 20%, a drop of nearly one-third. Of the nineteen countries, fourteen showed a decrease in their EMTRs, while five showed an increase.

It is likely that tax rates will in general continue to fall. Non-tax barriers to overseas investment will likely further decline, especially in Eastern Europe and Asia, increasing the mobility of capital and forcing further competitive reductions in tax rates. As a recent example of this process, most former Soviet-bloc countries that have entered the EU have been active in reducing their tax rates to attract investment. Poland, Hungary and Latvia have all cut their rates to below twenty percent, well below the levels pertaining in most pre-enlargement member states. In line with trends in corporate tax policy in Eastern Europe, Russia recently announced its implementation of a "flat tax" at a rate of a mere thirteen percent.

At one stage, it seemed that corporate tax competition might be curbed through the development of international initiatives aimed at outlawing “harmful tax practices”, in particular through the OECD’s recent project against harmful tax competition (OECD, 1998). Originally, the OECD’s stated criteria for identifying harmful tax practices (occurring both in member states and in “tax havens”) included the level of effective tax rates. However, after pressure from mostly US-based pro-market organisations (which were eventually successful in convincing the US government to withdraw its support for the original proposals), after a successful rearguard action from the tax havens, and after dissent from within its own committees, the OECD refocused its project away from tax regimes aimed at attracting geographically mobile resources towards the exchange of information to counter tax evasion.

In similar vein, and at around the same time, the EU unveiled its own package to tackle harmful tax competition (European Commission, 1997). The package included a Code of Conduct for Business Taxation whereby member states undertook to avoid tax measures that constitute harmful tax competition such as incentives that apply only to non-residents, or the “ring-fencing” of tax regimes. Under the Code, however, cuts in the general level of corporate taxation pertaining in a country are viewed as not constituting harmful tax competition. Such a view arguably makes this kind of tax cutting more likely, leading to the prospect of a “race to the bottom” with regards to overall tax rates, which could severely damage revenues (see Keen, 2001).

Up to now, the impact on tax revenues of falls in tax rates has tended to be mitigated somewhat by a concurrent expansion in nations’ tax bases (see for example Lee and McKenzie, 1989; Collins and Shakelford, 1996). This has been achieved through, for example, the phasing out of investment credits, a reduction in accelerated depreciation, and attempts at tax exportation by tightening up of transfer pricing and controlled foreign company legislation. However, this tax base expansion cannot occur indefinitely. At some point, if tax competition continues to push tax rates downwards, this process will inevitably impact upon government revenues.

Corporate tax revenues have up to now also been supported by improvements in corporate productivity that have led to an increase in the relative size of the corporate sector in many nations, such as the UK.<sup>25</sup> This suggests that the increase in corporate tax revenues may be accounted by reference to the Laffer curve, the bell-shaped curve that explains that there is an optimum rate of tax at which maximum government revenue is yielded. At rates lower than this optimum, revenues will increase due to a combination of the incentive effect of the lower tax rate on corporate activity and a decrease in the incentive to avoid or evade taxation. If, as is now widely believed, tax rates were on the “wrong” or inverse portion of the curve before the tax reforms of the early 1980s, then this would explain the subsequent reductions in tax rates being accompanied by increases in corporate tax revenues.

The future direction of corporate tax revenues is likely therefore to depend largely upon whether the adverse effects on government revenues of reductions in tax rates will continue to be offset by the revenue enhancing consequences of improved corporate productivity, investment and the expansion of the corporate sector; that is,

---

<sup>25</sup>Some countries, having competed aggressively for foreign investment through reductions in corporate tax rates, have also gained significant corporate tax revenues from their expanded stock of overseas capital. Ireland is a case in point here.

upon whether tax rates still currently dwell on the inverse portion of the curve. Lower tax rates might also increase tax revenues by reducing the incentive for international tax avoidance and evasion, although increased opportunities for such activities are likely to mitigate against this.

There is, nonetheless, a possibility that tax competition may reduce corporate tax revenues to a level at which the economic costs of compliance and enforcement outweigh the benefits of retaining the tax, leading to government reconsideration of its viability. However, there is likely to be strong support, at least in some countries, for at least some level of corporate taxation. As mentioned earlier, the tax enables host governments to take a share of the profits of (foreign-owned) companies made in the host country. The more location-specific these opportunities, such as the exploitation of natural resources or manpower, the more governments can tax such profits with comparative immunity from tax competition. This suggests that some host governments, especially those of natural resource-rich, capital-importing countries such as Australia and Canada, are unlikely to remove entirely their own right to tax profits. This does not, however, rule out corporate tax atrophy on foreign investments that do not earn location-specific rents.

The extent to which corporate tax revenues will in general decline will also depend largely on whether voters prefer to maintain taxes at a comparatively high level, accompanied by, presumably, a high level of public investment, or to allow tax competition to reduce tax levels to encourage private investment. That is, the fate of the tax may rest on the future political persuasions of electorates as to the extent to which they accept market forces or government involvement as the main driving force for change. The tax's future is also likely to depend upon the extent to which governments are able to find alternative sources of revenue. While a broad discussion of the future of other taxes is not possible here, a few brief comments may be useful.

Taxes on the income of individuals have until recently been comparatively immune to competitive pressures, since, for reasons of family ties, language, rules of professional association, etc., the individual income tax base is normally much less internationally mobile than the corporate one. However, its mobility is undoubtedly growing, especially within blocs such as the EU. This means that in future, governments may find that tax revenues from this source may well be curtailed through tax competition. The same may well be true of consumption or expenditure taxes, at least in the case of small countries with close borders, and in view of the fact that purchasing over borders has been facilitated by Internet technology. In any case, the ability of governments to tax expenditure in many countries seems to have reached a ceiling, especially in Europe where VAT rates find themselves close to the limits of their political acceptance. In light of these limitations, tax authorities may in future find themselves looking more to the most immobile of tax bases, property, as a source of revenue. Further sources of revenue may be found in newer forms of taxation, such as "green" taxes, which are likely to find increasing acceptance with the sensibilities of electorates as concerns about the environment rise. These taxes have already made a significant impact on the structure of tax revenues in many developed countries.

## **CONCLUDING REMARKS**

As the world economy continues to transform and integrate, the problems posed by the existence of the corporate tax have intensified and become more exposed. These trends are likely to continue in future.

In spite of these challenges, the corporate tax is likely to survive in some form, at least for the foreseeable future. Today it represents a long-established, significant and welcome source of revenue for governments. It can be collected from an easily identifiable source, and is widely seen as justified by the general public. As the IFS Capital Taxes Group (1991, p.9) succinctly put it:

“Perhaps the most persuasive reason for retaining a separate tax on profits is not only that we do, but that we can.”

Worldwide abolition is not possible in the foreseeable future as it would require international tax co-ordination on a scale that has not been in evidence to date. A more likely scenario is that a major economy such as the US would take the lead in abolishing the tax, in which case smaller countries would have a strong incentive (or have no choice but) to follow its lead.

Even in the absence of such a move, if competitive pressures reduce the corporate tax's importance to government revenues and compliance and enforcement costs continue to rise, governments may eventually be forced to reconsider the merits of retaining the tax. Whether this scenario will eventually materialise depends largely on uncertain future trends in economic and political direction and the ability of governments to identify and exploit alternative sources of revenue.

## REFERENCES

- Alworth, J. (1998), “Taxation and Integrated Financial Markets: The Challenges of Derivatives and other Financial Innovations”, *International Tax and Public Finance*, 5: 507-34.
- Baker and McKenzie (2001), *The Effective Tax Burden of Companies in the Member States of the EU: The Perspective of a Multinational Investor*, Baker and McKenzie, Amsterdam.
- Bond, S., L. Chennells, M. Devereux, M. Gammie, and E. Troup (2000), *Corporate Tax Harmonisation: A Guide to the Debate*, IFS, London.
- Citron, R. (2002), “The Future of Tax in the 21st Century: A Practitioner's Perspective”, *British Tax Review*, 3: 161-179.
- Cnossen, S. (1990), “The Case for Tax Diversity in the European Community”, *European Economic Review*, 34: 471-479.
- Collins, J.H. and D.A. Shackelford (1996), “Corporate Domicile and Average Effective Tax Rates: The Cases of Canada, Japan, the United Kingdom and the United States”, in J. Slemrod (ed.), *The Taxation of Multinational Corporations*, Kluwer Academic Publishers, Boston, MA.
- Cooper, G. and R. Gordon (1998), “Taxation of Enterprises and their Owners”, in V. Thuronyi (ed.), *Tax Law Design and Drafting*, IMF, Washington, DC.
- Devereux, M.P., R. Griffith, and A. Klemm (2002), “Corporate Income Tax Reforms and Tax Competition”, *Economic Policy*, 17(35): 451-495.
- Devereux, M.P. and M. Pearson (1989), *Corporate Taxation and Economic Efficiency*, IFS, London.



- Doernberg, R. and L. Hinnekens (1999), *Electronic Commerce and International Taxation*, Kluwer Law International, The Hague.
- Eden, L. (1998), *Taxing Multinationals: Transfer Pricing and Corporate Income Taxation*, University of Toronto Press, Toronto.
- European Commission (1997), *Towards Tax Co-ordination in the European Union: A Package to Tackle Harmful Tax Competition*, COM(97), 495 final.
- European Commission (2001), *Company Taxation in the Internal Market (Executive Summary)*, SEC (2001), 1681.
- Gammie, M. (2001), "Corporate Taxation in Europe: Paths to a Solution", *British Tax Review*, 4: 233-249.
- Gordon, R.H. and J. MacKie-Mason (1995), "The Importance of Income Shifting to the Design and Analysis of Tax Policy", in M. Feldstein, J.R. Hines, and R.G. Hubbard (eds.), *Taxing Multinational Corporations*, University of Chicago Press, Chicago.
- Harris, P.A. (1996), *Corporate/Shareholder Income Taxation and Allocating Taxing Rights between Countries*, IBFD, Amsterdam.
- Ho, D., A. Mak and B. Wong (2004), "Taxation of E-commerce in a Source-based Jurisdiction: A Study of Hong Kong", *Journal of Business Law*, March: 247-261.
- IFS Capital Taxes Group (1991), *Equity for Companies: A Corporation Tax for the 1990s*, IFS Commentary No.26, IFS, London.
- James, S. (2000), "The Difficulties of Achieving Tax Harmonisation: The Case of the European Union", *Asia-Pacific Journal of Taxation*, 4(4): 42-52.
- James, S. and C. Nobes (2003), *The Economics of Taxation: Principles, Policy and Practice* (7<sup>th</sup> ed.), Financial Times Prentice Hall, Harlow.
- Kay, J. and M. King (1991), *The British Tax System*, Oxford University Press, Oxford.
- Keen, M. (2001), "Preferential Tax Regimes Can Make Tax Competition Less Harmful", *National Tax Journal*, 4(4): 757-763.
- Krever, R. (1985), "Companies, Shareholders and Tax Reform", *Taxation in Australia*, 10(3): 163-175.
- Lee, D.R. and R.B. McKenzie (1989), "The International Political Economy of Declining Tax Rates", *National Tax Journal*, 41(1): 79-83.
- Mead, J.E. (1978), *The Structure and Reform of Corporate Taxation*, Allen and Unwin, Boston, MA.
- Musgrave, P.B. and R.A. Musgrave (1989), *Public Finance in Theory and Practice*, McGraw-Hill, New York.
- Musgrave, P.B. and R.A. Musgrave (1990), "Fiscal Co-ordination and Competition in an International Setting", in *Proceedings of the 8th Munich Symposium on International Taxation*, Kluwer Academic Publishers, Deventer.

- Oates, L. (2002), "Taxing Companies and their Shareholders: Design Issues", in A. Lymer and J. Hasseldine (eds.), *The International Tax System*, Kluwer Academic Publishers, Norwell, MA.
- OECD (1991), *Taxing Profits in a Global Economy: Domestic and International Issues*, OECD, Paris.
- OECD (1998), *Harmful Tax Competition: An Emerging Global Issue*, OECD, Paris.
- OECD (2005), *OECD Revenue Statistics*, OECD, Paris.
- OECD (2006), *The OECD's Project on Harmful Tax Practices: The 2006 Progress Report*, OECD, Paris.
- Owens, J. (1993), "Globalisation: The Implications for Tax Policies", *Fiscal Studies*, 14(3): 21-44.
- Ricardo, D. (1817), *On the Principles of Political Economics and Taxation*, J. Murray, London.
- Ruding, O. (1992), *Report of the Committee of Independent Experts on Company Taxation*, European Commission, Brussels.
- Sawyer, A.J. (2004), "Is an International Tax Organisation an Appropriate Forum for Administering Binding Rulings and APAs?", *e-Journal of Taxation Research*, 2(1): 8-70.
- Simmons, R.S. (2006), "Does Recent Empirical Evidence Support the Existence of International Corporate Tax Competition?", *Journal of International Accounting, Auditing and Taxation*, 15(1): 16-31.
- Singleton, W.R. (1999), "An Analysis of the Taxation of Income from Capital in the Asian Region", *Asia-Pacific Journal of Taxation*, 3(3): 75-95.
- Spencer, D.E. (2004), "OECD Proposals on Harmful Tax Practices: An Update", *Journal of International Taxation*, 15(9): 38-54.
- Tyson, L.C. (1996), "Unitary Apportioning: A Key to Global Tax Harmony", *International Tax Journal*, 22: 35-54.
- UNCTAD (2001), *World Investment Report 2001: Promoting Linkages*, United Nations, Geneva.
- Warren, N. (2002), "Internet Challenge to Tax System Design", in A. Lymer and J. Hasseldine (eds.), *The International Tax System*, Kluwer Academic Publishers, Norwell, MA.
- Weiner, J.M. (2001), "The European Union and Formula Apportionment: Caveat Emptor", *European Taxation*, 41(10): 380-388.
- Wunder, H.F. (1999), "International Tax Reform: Its Effect on Repatriation Decisions of Multinational Corporations", *Journal of International Accounting, Auditing and Taxation*, 8(2): 337-353.

# Charities for the Benefit of Employees: Why Trusts for the Benefit of Employees Fail the Public Benefit Test

**Fiona Martin\***

## **Abstract**

Charities are granted significant financial benefits through the exemption from income tax and deductibility of donations under the provisions of the *Income Tax Assessment Act, 1997* (Cth). The concept of what is a charity or a charitable purpose which is a fundamental requirement of the income tax exemption is not defined in any taxation legislation and must be found in the common law. The courts have concluded that a charitable purpose includes charities for the benefit and assistance of the sick. An organization that has been established for the benefit of employees and former employees who are suffering work related illnesses would therefore have a charitable purpose. There is however the further requirement that the entity's objectives must be for the benefit of the public. This article analyses the requirement of public benefit for a charitable purpose as it relates to an entity established for the benefit of employees and former employees of a large corporation. It discusses the rationale for the public benefit requirement and how the courts have applied this criterion to trusts for the benefit of employees and former employees. In conclusion it examines alternative approaches to the current application of the public benefit test.

## **INTRODUCTION**

The main legislation applying to all not-for-profit organizations including charities is the *Income Tax Assessment Act, 1997* (Cth) (the 1997 Act). Division 50 of the 1997 Act provides for the exemption from income tax of a number of organizations including charities.<sup>1</sup> Furthermore, if an organization is considered a public benevolent institution (PBI), donations to it will be eligible for tax deductibility.<sup>2</sup> Whilst every entity that is a PBI is a charity<sup>3</sup>, not all charities are PBIs. In order to determine whether a trust established for the benefit of employees and former employees of a company is entitled to an exemption from income tax it is therefore necessary to consider what is meant by a charity under the 1997 Act.

'Charity' and 'charitable' are words that have a common or everyday meaning.<sup>4</sup> There is no definition of 'charity' in the 1997 Act. This is despite the fact that a statutory

---

\* Senior Lecturer at Atax, Faculty of Law, University of New South Wales, Sydney, Australia. Email: f.martin@unsw.edu.au.

<sup>1</sup> Refer specifically to s 50-5 item 1.1. This section was formerly s23(e) of the *Income Tax Assessment Act, 1936* (Cth).

<sup>2</sup> Section 30-45 *Income Tax Assessment Act, 1997* (Cth).

<sup>3</sup> Taxation Ruling TR 2003/15 'Income Tax and Fringe Benefits Tax: Public Benevolent Institutions' states that 'For the purposes of Division 50 of the ITAA 1997, a public benevolent institution which is an entity is a charitable institution' [24].

<sup>4</sup> *Commissioners for Special Purposes of Income Tax v Pemsel* [1891] AC 531, 583 (Lord Macnaghten).

definition was recommended by the 2001 'Report of the Inquiry into the Definition of Charities and Related Organisations'.<sup>5</sup>

They are also words that have a technical legal meaning and which have been discussed and elaborated on over the years by the courts.<sup>6</sup> Two important issues arise from this, for an entity to be charitable under the 1997 Act its activities must be the promotion of charitable objectives and these charitable objects must come within the legal meaning of charitable.

This article analyses the legal meaning of the words 'charity' and 'charitable' for the purposes of Division 50 of the 1997 Act and explains why an entity established to administer compensation payments to employees and former employees of a company who are suffering from a work related illness does not fall within this meaning as currently established by the Australian and English courts. Such an entity could include a fund established by a company if the fund is limited to compensation for its employees and former employees suffering from a work related illness or injury. The article also examines the public policy rationale for this conclusion and looks at alternative approaches to the current application of the public benefit test to charities.

## LEGAL MEANING OF "CHARITABLE"

As far back as 1601 the English courts and legislature were considering the issue of when an entity's objectives were charitable for income tax purposes. The Preamble to the *Charitable Uses Act 1601*<sup>7</sup> is possibly the earliest record of an analysis of what types of activities may constitute charitable purposes. This Act is referred to as the *Statute of Elizabeth* and its Preamble set out the following charitable purposes:

- relief of the aged, impotent and poor;
- maintenance of sick and maimed soldiers and mariners;
- schools and scholars in universities;
- repair of bridges, ports, havens, causeways, churches, sea-banks and highways;
- education and preferment of orphans;
- maintenance of prisons;
- marriages of poor maids;
- aid and help of young tradesmen and handicraftsmen;
- aid and help of persons decayed;
- the relief or redemption of prisoners or captives;
- the aid or ease of any poor inhabitants concerning payment of fifteens; and
- setting out of soldiers and other taxes.

<sup>5</sup> Commonwealth of Australia, 'Report of the Inquiry into the Definition of Charities and Related Organisations' (2001) 18; Treasurer's Press Statement "Final Response to the Charities Definition Inquiry" 11 May 2004, <http://www.treasurer.gov.au/tsr/content/pressreleases/2004/031.asp> at 30 November 2006.

<sup>6</sup> For example refer *Commissioners for Special Purposes of Income Tax v Pemsel* [1891] AC 531, 583 (Lord Macnaghten); *Re Hilditch deceased* (1986) 39 SASR 469, 475 (O'Loughlin J); *Alice Springs Town Council v Mpweteyerre Aboriginal Corporation* (1997) 139 FLR 236, 251-252 (Mildren J).

<sup>7</sup> 43 Eliz I c4.

This Preamble was not considered, even at that time, to be exhaustive as significant charitable areas such as charities for the advancement of religion and of some educational institutions were not included.<sup>8</sup>

In *Morice v Bishop of Durham*,<sup>9</sup> an English case that was decided two hundred years later, the court ruled that for a purpose to be ‘charitable’ it had to be within the spirit and intendment of the Preamble to the *Statute of Elizabeth*.<sup>10</sup>

Subsequently, in 1891 Lord Macnaghten in *Pemsel’s* case stated that the legal meaning of ‘charity’ could be classified into four separate divisions. He stated that a charity should be a trust for one of the following:

- the relief of poverty;
- the advancement of education;
- the advancement of religion; or
- for other purposes beneficial to the community.<sup>11</sup>

The classification of charitable purpose into these four areas was seen as a milestone and has been consistently used in judicial considerations ever since.<sup>12</sup>

Subsequent Australian cases have confirmed the principle that the classes of charities referred to in the Preamble to the *Statute of Elizabeth* and by Lord Macnaghten in *Pemsel’s* case also apply to Australian Law. As Barwick CJ stated in a 1971 Australian case:

[W]hether or not the institution is relevantly charitable will be determined according to the principles upon which the Court of Chancery would act in connexion with an alleged charity. That means that the indications contained in the preamble to the Statute of Elizabeth 1601 and the classifications in Lord Macnaghten’s speech in *Commissioner for Special Purposes of Income Tax v Pemsel* (*Pemsel’s* Case) [1891] AC 531, 583 are to be observed in deciding whether or not the institution is charitable for the purposes of the Act.<sup>13</sup>

In the same case Windeyer J said:

A charitable institution is an instrument designed for carrying a charitable purpose into effect...What in law is a charitable purpose is to be gathered from the miscellany of objects set out in the preamble to the statute, 43 Eliz, I, c. 4. The spirit and intendment of that enactment, as well as its words have for centuries dictated the meaning of charity in law.<sup>14</sup>

<sup>8</sup> For a complete discussion refer H Picarda, *The Law and Practice Relating to Charities* (3<sup>rd</sup> ed, 1999) 72; F M Bradshaw, *The Law of Charitable Trusts in Australia* (1983) 2.

<sup>9</sup> (1805) 10 Ves 522.

<sup>10</sup> Ibid 540.

<sup>11</sup> *Income Tax Special Purposes Commissioners v Pemsel* [1891] AC 531, 583.

<sup>12</sup> For example *Salvation Army (Victoria) Property Trust v Shire of Fern Tree Gully* (1952) 85 CLR 159, 173; *Ashfield MC v Joyce* (1976) 10 ALR 193.

<sup>13</sup> *The Incorporated Council of Law Reporting of the State of Queensland v The Commissioner of Taxation* (1971) 125 CLR 659, 666.

<sup>14</sup> Ibid 671.

In 1974 the High Court of Australia confirmed the place of the Preamble to the *Statute of Elizabeth* in Australian law in its conclusion that in order for an institution to be charitable it must be:

- Within the spirit and intendment of the Preamble to the *Statute of Elizabeth*; and
- For the public benefit.<sup>15</sup>

The Australian Government has also publicly confirmed that this is the case. In Taxation Ruling TR 2005/21 'Income Tax and Fringe Benefits Tax: Charities', the Australian Taxation Office (the ATO) states that:

For a purpose to fall within the technical legal meaning of 'charitable' it must be:

- beneficial to the community, or deemed to be for the public benefit by legislation applying for that purpose; and
- within the spirit and intendment of the *Statute of Elizabeth*, or deemed to be charitable by legislation applying for that purpose.<sup>16</sup>

The Australian courts have generally recognised the following categories of charity:

- the relief of poverty;
- the relief of the needs of the aged;
- the relief of sickness or distress;
- the advancement of religion; and
- the advancement of education.<sup>17</sup>

Other charitable purposes have been recognised under the general heading 'for the benefit of the community'.<sup>18</sup>

The ATO also recognizes that an organization established for the purposes of relieving sickness has a charitable purpose.<sup>19</sup>

It is therefore clear that an entity established by an employer for the benefit of persons suffering from a work related illness or injury is for the relief of sickness and therefore within a charitable category established under the Preamble to the *Statute of Elizabeth*. One of the main problems from the employer's perspective is however whether the second criterion for a purpose to be charitable, i.e. whether it is for the benefit of the public, has been satisfied.

<sup>15</sup> *Royal National Agricultural Association v Chester* [1974] 48 ALJR 304, 305.

<sup>16</sup> Taxation Ruling TR2005/21 'Income Tax and Fringe Benefits Tax: Charities' [8].

<sup>17</sup> Kerry O'Halloran 'Social Inclusion and the Indigenous People of Australia: Achieving a Better Fit Between Social Need and the Charity Law Framework' 6 (2) *The International Journal of Not-for-Profit Law* [http://www.icnl.org/JOURNAL/vol6iss2/ar\\_ohalloran.htm](http://www.icnl.org/JOURNAL/vol6iss2/ar_ohalloran.htm) at 11 November 2006.

<sup>18</sup> Ibid.

<sup>19</sup> Taxation Ruling TR 2005/21 'Income Tax and Fringe Benefits Tax: Charities' [200].

## PUBLIC BENEFIT

Two important issues now arise for consideration. Firstly, what does ‘public benefit’ mean for the purposes of determining whether an entity is charitable and consequently able to take advantage of the tax exemption and secondly, what is the policy rationale behind the public benefit requirement? The courts have consistently stated that it is important to ensure that the tax advantages that accrue to charitable organisations are not manipulated for the benefit of families or groups of related people<sup>20</sup> so that individuals are prevented from taking advantage of the favourable tax position available to charities for what is essentially a private purpose.<sup>21</sup> Lord Greene certainly considered the tax advantages of charities a strong consideration when deciding that a trust for the education of descendants of a named person was really a family trust and not charitable as it was not for the benefit of the community.<sup>22</sup>

The public benefit indicates a purpose that must somehow add to or advantage the community rather than individuals.

The courts have clearly applied this criterion to charities for the purpose of relieving sickness. In *Waterson and others v Hendon Borough Council*<sup>23</sup> a friendly society operated a hospital and other clinics for the benefit of its members. Mr Justice Salmon held that it was not charitable because its purposes were not altruistic; ‘the object of the members of the society is not to do good to others but to themselves’.<sup>24</sup>

The requirement of a benefit to the public or community was clearly stated by Lord Wrenbury in *Verge v Somerville* when he said:

To ascertain whether a gift constitutes a valid charitable trust...a first enquiry must be made whether it is public - whether it is for the benefit of the community or of an appreciably important class of the community. The inhabitants of a parish or town, or any particular class of such inhabitants, may, for instance, be the objects of such a gift, but private individuals, or a fluctuating body of individuals, cannot.<sup>25</sup>

This line of thinking was confirmed by the courts in even earlier decisions than *Verge v Somerville*. A Privy Council decision of 1875 relating to a trust for the observance of religious services for the testatrix and her late husband was held not to be charitable on the basis that there was no public benefit.<sup>26</sup> In fact the cases referring to this requirement can be traced back to at least the eighteenth century.<sup>27</sup>

The cases have therefore come down very strongly in favour of the principle that for an organization to be charitable it must not only fall within one of the four divisions discussed by Lord Macnaghten in *Pemsel’s* case, but it must also be founded for the

<sup>20</sup> *Re Compton, Powell v Compton* [1945] 1 All ER 198; *Oppenheim v Tobacco Securities Trust Co Ltd* [1951] AC 297; *Dingle v Turner* [1972] 1 All ER 878, 889-890, (Lord Cross of Chelsea).

<sup>21</sup> *Perpetual Trustee Co (Ltd) v Ferguson* (1951) 51 SR (NSW) 256, 263 (Sugerman J).

<sup>22</sup> *Re Compton, Powell v Compton* [1945] All ER 198, 206.

<sup>23</sup> [1959] 2 All ER 760.

<sup>24</sup> *Ibid* 764.

<sup>25</sup> [1924] AC 496, 499.

<sup>26</sup> *Yeap Cheah Neo and Others v Ong Cheng Neo* [1875] PCLR 381, 396.

<sup>27</sup> *Jones v Williams* (1767) 2 Amb. 651, 652 (Lord Camden).

benefit of the public.<sup>28</sup> The exception to this is a line of cases that indicate that charities for the relief of poverty do not require a public benefit.<sup>29</sup>

### THERE MUST BE AN ACTUAL BENEFIT

In order to have a 'public benefit' there must be some actual or tangible benefit of an entity's objectives. In 1949 an English Court held that the purposes of a group of cloistered and contemplative nuns was not charitable as the benefit of prayer and the example of pious lives was too vague and incapable of proof to be an actual benefit.<sup>30</sup> This decision has not been overturned however some commentators consider that this case would not be viewed favourably by modern Australian and New Zealand courts<sup>31</sup> and it has been amended through legislation.

The public benefit must be real or substantial<sup>32</sup> although it can extend beyond material benefits to social, mental and spiritual benefits.<sup>33</sup> An entity is not for the benefit of the public if its aims are contrary to public policy,<sup>34</sup> unlawful or for a lawful purpose that is to be carried out by unlawful means.<sup>35</sup> Although it might be arguable that a school for thieves or criminals advances education it would not be for the public benefit.<sup>36</sup>

### THE MEANING OF BENEFIT TO A SUFFICIENT SECTION OF THE COMMUNITY

Once it is established that a purpose is of actual benefit to the community which is readily assumed if the purpose is to assist the sick,<sup>37</sup> it is necessary to determine whether there is benefit to the community or an appreciable section of the community.<sup>38</sup> Whilst this section of the public can be small it should not be 'numerically negligible'.<sup>39</sup> The concept requires that the group benefited is linked by some criteria other than personal relationships. Providing medical assistance to your family members might be a charitable thing to do but there is no public benefit, whereas donating money to a particular organisation which provides medical aid to the community has a benefit to the public.

<sup>28</sup> *Re Compton* [1945] 1 All ER 198; *Gilmour v Coates* [1949] AC 426; *Dingle v Turner and others* [1972] 1 All ER 878; Applied in Australia in *Re Hilditch deceased* (1986) 39 SASR 469.

<sup>29</sup> *Oppenheim v Tobacco Securities Trust Co Ltd* [1951] AC 297, 305 (Lord Simonds); *Dingle v Turner* [1972] 1 All ER 878, 888 (Lord Cross of Chelsea).

<sup>30</sup> *Gilmour v Coates* [1949] All ER 848, 855 (Lord Simonds). Although this situation has been amended by legislation in Australia and is now considered charitable under s 5 of the *Extension of Charitable Purpose Act, 2004* (Cth).

<sup>31</sup> Gino Dal Pont, *Charity Law in Australia and New Zealand* (2000) 171.

<sup>32</sup> *Re Pinion (deceased)*; *Westminster Bank Ltd v Pinion and another* [1964] 1 All ER 890.

<sup>33</sup> Dal Pont, above n 31, 14-15.

<sup>34</sup> *Perpetual Trustee Co (Ltd) v Robins and others* (1967) 85 WN (Pt. 1) (NSW) 403, 411. See also *Thrupp v. Collett (No.1)* (1858) 53 ER 844; *Re MacDuff*; *MacDuff v MacDuff* [1895-9] All ER Rep 154, 162-3; *Re Pieper (deceased)*; *The Trustees Executors & Agency Co. Ltd v Attorney-General (Vic.)* [1951] VLR 42.

<sup>35</sup> *Auckland Medical Aid Trust v Commissioner of Inland Revenue* [1979] 1 NZLR 382, 395.

<sup>36</sup> *Re Pinion (deceased)*; *Westminster Bank Ltd v Pinion and another* [1964] 1 All ER 890, 893 (Harman LJ).

<sup>37</sup> *National Anti-Vivisection Society v Inland Revenue Commissioners* [1948] AC 31, 65 (Lord Simonds).

<sup>38</sup> *Verge v Somerville* [1924] AC 496, 499; *Oppenheim v Tobacco Securities Trust Co Ltd* [1951] AC 297, 305 (Lord Simonds).

<sup>39</sup> *Oppenheim v Tobacco Securities Trust Co Ltd* [1951] AC 297, 306 (Lord Simonds); *Aboriginal Hostels Ltd v Darwin City Council* (1985) 75 FLR 197, 209 (Nader J).



Not all charities are for the benefit of the entire community and the very fact that they are charities often means that their objectives are to assist a section of the community that has special needs or disadvantages.<sup>40</sup> However as Lord Simonds in *Williams' Trustees v Inland Revenue Commissioners*<sup>41</sup> said '...a trust in order to be charitable must be of a public character. It must not be merely for the benefit of particular private individuals.'<sup>42</sup>

In *Re Income Tax Acts (No 1)*<sup>43</sup> Lowe J expressed the view that if an organisation is open to the public, even though not everyone joins, this group will be a section of the public sufficient for the charitable purpose test. If on the other hand the organisation sets up an arbitrary test for membership such as many clubs, literary societies or trade unions do then the members cannot be considered a section of the public.<sup>44</sup> Lowe J went on to say:

A club, a literary society, a trade union may all have numerous members, but I think that none of these could properly be called a section of the public. They stand on the other side of the line. The distinguishing feature of each of these latter bodies is that it is an association which takes power to itself to admit or exclude members of the public according to some arbitrary test which it sets upon its rules or otherwise. Each of them does oppose a bar to admission within it. It is not one of the groups into which the community as a matter of necessary organisation or by convention is divided, but it is in a sense an artificial entity which exists for the benefit of its members as members thereof and not as members of the public.<sup>45</sup>

Many of the cases<sup>46</sup> that have unsuccessfully argued that the organization has a public benefit have failed because the class or group of members of the public, are linked by a relationship to someone or something. This is not considered to be in the public benefit as the quality which distinguishes them from other members of the public depends on their relationship to another person or entity. For example, the courts have held that an institution for the benefit of employees of a particular company will not be charitable,<sup>47</sup> neither will a school for the children of freemasons,<sup>48</sup> or a mutual benefit society such as a friendly society or a trade union.<sup>49</sup> A religious college failed the test of being a charitable institution as it was only open to the descendents of particular persons.<sup>50</sup> In these cases the benefits were intended for people in their capacity as employees, relatives or members rather than as a segment of the public. An institution for the benefit of persons in a particular geographic location would, on the other hand, be for the public benefit, as here the quality which links the group is not

---

<sup>40</sup> For a detailed discussion of the role of charities refer Dal Pont, above n 31.

<sup>41</sup> [1947] AC 447.

<sup>42</sup> Ibid 457.

<sup>43</sup> [1930] VLR 211, 223.

<sup>44</sup> Ibid 222-3.

<sup>45</sup> Ibid.

<sup>46</sup> For example, *Re Compton; Powell v Compton* [1945] 1 All ER 198; *Oppenheim v Tobacco Securities Trust Co Ltd* [1951] AC 297; *Thompson v Federal Commissioner of Taxation* (1959) 102 CLR 315.

<sup>47</sup> *Re Compton; Powell v Compton* [1945] 1 All ER 198; *Oppenheim v Tobacco Securities Trust Co Ltd* [1951] AC 297.

<sup>48</sup> *Thompson v Federal Commissioner of Taxation* (1959) 102 CLR 315.

<sup>49</sup> *Re Hobourn Aero Components Ltd's Air Raid Distress Fund* [1946] Ch 194.

<sup>50</sup> *Beatrice Alexandra Victoria Davies v Perpetual Trustee Co (Ltd) and others* (1959) 59 SR(NSW) 112.

their personal relationship but their physical location.<sup>51</sup> The argument is that as anyone can (theoretically) move to a particular location the section of the public benefited is not restricted by something outside its control such as an employment or family relationship.

Lord Greene MR expressed it in *Re Compton; Powell v Compton*:

[T]hey do not enjoy the benefit, when they receive it, by virtue of their character as individuals but by virtue of their membership of their specified class. In such a case the common quality which unites the potential beneficiaries into a class is essentially an impersonal one. It is definable by reference to what each has in common with the others, and that is something into which their status as individuals does not enter. Persons claiming to belong to the class do so not because they are AB, CD and EF but because they are poor inhabitants of the parish. If, in asserting their claim, it were necessary for them to establish the fact that they were individuals AB, CD and EF, I cannot help thinking that on principle the gift ought not to be held to be a charitable gift, since the introduction into their qualification of a purely personal element would deprive the gift of its necessary public character.<sup>52</sup>

If benefits are restricted to family members or friends the courts have considered that there is no public benefit.<sup>53</sup> As Farwell J said in 1902 ‘There is, in truth, no ‘charity’ in attempting to improve one’s own mind or save one’s own soul. Charity is necessarily altruistic and involves the idea of aid or benefit to others...’<sup>54</sup>

Whilst limiting the number of people who can benefit does not prevent the public benefit test being satisfied the number of potential beneficiaries must not be numerically negligible.<sup>55</sup>

The ATO has also stated that a trust for the benefit of employees of a particular employer is not for the public benefit.<sup>56</sup>

The refusal to grant charitable status to a trust for the assistance of sick employees and former employees of a company is therefore based on the common law rationale that such a trust is not for the benefit of the public or a section of the public. This is because the beneficiaries of this trust are defined by reference to their employment with the company which is considered a personal connection and one not available to general members of the public. This is despite the fact that the beneficiaries may well number hundreds or thousands of people. In *Oppenheim v Tobacco Securities Trust Co. Ltd*<sup>57</sup> a trust was established for the benefit of children of employees or former employees of a British company. The potential employees and former employees numbered over 110,000. The court held that the common quality of the potential beneficiaries of the trust was employment by a particular employer and that as a

<sup>51</sup> *Re Compton; Powell v Compton* [1945] 1 All ER 198, 201; *Verge v Somerville* [1924] AC 496, 499.

<sup>52</sup> [1945] 1 All ER 198, 201.

<sup>53</sup> *Yeap Cheah Neo and others v Ong Cheng Neo* (1875) LR 6 PC 381; *Ip Cheung-Kwok v Sin Hua Bank Trustee Ltd and others* [1990] 2 HKLR 499.

<sup>54</sup> *Re Delaney; Conoley v Quick* [1902] 2 Ch 642, 648-649.

<sup>55</sup> *Oppenheim v Tobacco Securities Trust Co Ltd* [1951] AC 297, 306 (Lord Simonds); approved in *Aboriginal Hostels Ltd v Darwin City Council* (1985) 75 FLR 197, 209 (Nader J).

<sup>56</sup> Taxation Ruling TR 2005/21 ‘Income Tax and Fringe Benefits Tax: Charities’ [54].

<sup>57</sup> [1951] AC 297.

connection through common employment does not make the group a section of the community, the trust was not charitable.<sup>58</sup>

The court's thinking in this and other cases which have confirmed this line of reasoning was clearly influenced by the fiscal advantages that arise from being granted charitable status. Lord Greene MR makes several references to the tax free status of charities in his comments in *Re Compton, Powell v Compton*<sup>59</sup> as the rationale for restricting charities to those that benefit the public as does Lord Cross in *Dingle v Turner*.<sup>60</sup> Lord Cross stated in this case:

In answering the question whether any given trust is a charitable trust the courts – as I see it - cannot avoid having regard to the fiscal privileges accorded to charities...To establish a trust for the education of the children of employees in a company in which you are interested is no doubt a meritorious act; but however numerous the employees may be the purpose which you are seeking to achieve is not a public purpose. It is a company purpose and there is no reason why your fellow taxpayers should contribute to a scheme which by providing 'fringe benefits' for your employees will benefit the company by making their conditions of employment more attractive.<sup>61</sup>

#### ARGUMENTS AGAINST THE PUBLIC BENEFIT RESTRICTION IN ALL SITUATIONS

It is arguable that there are other approaches that will allow distinctions between trusts that are based on a personal relationship and which therefore fail the 'public benefit' requirement and those that are based on some other criterion which enables them to fall across the line. This is particularly relevant these days when trusts might be established for employees or members of large organizations that employ or have as members many thousands of people. It is also relevant to the situation where the employees and former employees of a company are not actually benefited, (in the sense of education of their children or some other fringe benefit of employment) but are compensated for their employer's failure to provide them with a safe working environment and the subsequent injury to their health. It is also arguable that the earlier judicial reasoning regarding a section of the public did not mean that trusts benefiting large groups of people should necessarily be excluded.

In *Oppenheim v Tobacco Securities Co Ltd*<sup>62</sup> the dissenting judge Lord MacDermott considered that the better question to ask in determining whether any given trust was public or private was a question of degree in the light of the facts of the particular case. His Lordship stated:

...I see much difficulty in dividing the qualities or attributes which may serve to bind human beings into classes, into two mutually exclusive groups, the one involving individual status and purely personal, the other disregarding such status and quite impersonal. As a task this seems to me no less baffling and elusive than the problem to which it is directed, namely, the

---

<sup>58</sup> Ibid 307.

<sup>59</sup> [1945] 1 All ER 198, 205, 206.

<sup>60</sup> [1972] 1 All ER 878, 889.

<sup>61</sup> Ibid 889-890.

<sup>62</sup> [1951] AC 297.

determination of what is and what is not a section of the public for the purposes of this branch of the law.<sup>63</sup>

In the later case of *Dingle v Turner*<sup>64</sup> the testator had provided in his will for the investment of a specific sum with the income going to pay pensions to poor employees of E Dingle and Co Ltd. The company employed over 600 people and there were a substantial number of ex-employees. Although the House of Lords decided the case using the line of cases exempting trusts for the relief of poverty from the public benefit requirement, they did make some interesting comments on the general requirement of public benefit. Lord Cross considered the above statements by Lord MacDermott in *Oppenheim's* case very favourably and criticised the distinction in the earlier cases between personal and impersonal relationships when determining the validity of a charitable trust.<sup>65</sup> His Lordship concluded that the real test should be the purpose of the trust and said:

But if one turns to large companies employing many thousands of men and women most of whom are quite unknown to one another and to the directors the answer is by no means so clear. One might say that in such a case the distinction between a section of the public and a private class is not applicable at all or even that the employees in such concerns as ICI and GEC are just as much 'sections of the public' as the residents in some geographical area. In truth the question whether or not the potential beneficiaries of a trust can fairly be said to constitute a section of the public is a question of degree and cannot be by itself decisive of the question whether the trust is a charity. Much must depend on the purpose of the trust. It may well be that, on the one hand, a trust to promote some purpose, *prima facie* charitable, will constitute a charity even though the class of potential beneficiaries might fairly be called a private class and that, on the other hand, a trust to promote another purpose, also *prima facie* charitable, will not constitute a charity even though the class of potential beneficiaries might seem to some people fairly describable as a section of the public.<sup>66</sup>

What then of the situation where all of the members of a particular trade or profession are employed by the same employer? The cases have held that a trust for the benefit of persons following a particular trade or profession is for the benefit of a section of the community.<sup>67</sup> A trust that is expressed as being for the benefit of all members of a profession living in a certain geographical area would be charitable and in this way a valid charity could be created which would cover all the employees of a particular organisation anyway.<sup>68</sup> It is arguable that where all the members of a profession are employed by the same employer a fund for their benefit should be considered charitable on the basis that a class of beneficiaries connected by an impersonal link is still a section of the public even though its members are also connected by a personal one.<sup>69</sup>

---

<sup>63</sup> Ibid 317.

<sup>64</sup> [1972] 1 All ER 878.

<sup>65</sup> Ibid 889.

<sup>66</sup> Ibid.

<sup>67</sup> *Hall v Derby Sanitary Authority* (1885) 16 QBD 163, approved in *Oppenheim v Tobacco Securities Co Ltd* [1951] AC 297.

<sup>68</sup> PS Atiyah, 'Public Benefit in Charities' (1958) 21 *The Modern Law Review* 138, 147.

<sup>69</sup> Ibid 147-148.

If the rationale for refusing to grant charitable status to a trust for the benefit of sick employees and former employees of a company is that this would grant a fringe benefit to these persons the argument seems illogical. The grant of money in this situation is to enable these employees and former employees to obtain medical assistance and support in cases where they are unable to work. It is very different from a trust for the education of employees' children. Furthermore, public policy would suggest that ambiguous cases should favour assistance towards the sick as this is an important charitable purpose.

## CONCLUSION

The law relating to charities needs to be flexible in order to meet the needs of potentially charitable situations that develop due to changes in society. When Lord Macnaghten first considered the four charitable headings he articulated in *Pemsel's* case it was virtually impossible for a successful action to be brought by an employee for an injury suffered at work against his or her employer.<sup>70</sup> The situation is now very different.

If the scenario is instead considered from the perspective of purpose, then it is certainly arguable that the provision of funds for medical assistance and financial support to employees and former employees of a company with work related illnesses is a public benefit. These employees, through no fault of their own, have suffered due to their employer's lack of provision of a safe working environment. They are members of the community and in significant need which, if not provided, will mean that they are a burden on the taxpayer and the general public. If this reduction in tax is not available to the fund then presumably less money will be available to the beneficiaries. This is not a fringe benefit that might make working for a company more attractive than some alternative employer, as could be argued in *Oppenheim's* case.

On the other hand it is arguable that a company that does not provide a safe working environment for its employees is the entity that must bear the financial burden of providing for its employees and former employees who have been injured due to its negligence. Why then it may be argued, should the taxpayer come to the aid of such a company by providing financial assistance through the tax system? Although different, isn't it providing just as significant a fiscal benefit to such a company as the court rejected in *Oppenheim*? It could be even further argued that providing tax relief will result in the employer reducing its payments to the compensation fund rather than the employees gaining any additional payment. This would be a benefit to the company rather than the public as personified by its employees and former employees.

One thing that seems clear is that any argument for or against the public benefit limitation on charities has difficulties and drawbacks. The rationale of limiting charitable status to organisations that benefited a section of the community was appropriate when commercial life was much simpler, however this is no longer the case and there are valid arguments for looking at the purpose of the entity in the

---

<sup>70</sup> Harold Luntz and David Hambly, *Torts Cases and Commentary* (4<sup>th</sup> Ed, 1995) 54 [1.3.1], [6.1.1]-[6.1.2]. Furthermore worker's compensation legislation was not enacted in England until 1897, when the *Workmen's Compensation Act 1897* was introduced, 6 years after *Pemsel's* case.

context of society's needs rather than the relationship of its objects when determining charitable status.

# Responsive Regulation and the Uncertainty of Tax Law – Time to Reconsider the Commissioner’s Model of Cooperative Compliance?

**Mark Burton\***

## **Abstract**

Over the last decade the Australian Taxation Office has adapted the model of ‘responsive regulation’ in developing its cooperative compliance model. This model seeks to promote voluntary compliance with Australia’s taxation laws by tailoring the administrative treatment of taxpayers in accordance with the individual taxpayer’s tax compliance posture. The fulcrum of this model of tax administration is the proposition that taxation law is determinate, such that ‘complying’ and ‘non-complying’ taxpayers may be segregated and treated accordingly. This paper argues that this dichotomous model is problematic in at least some tax contexts, and considers the implications of legal indeterminacy for the cooperative compliance model.

## **1. INTRODUCTION**

At the time of its emergence in the 1990s, ‘responsive regulation’ promised a neat resolution of several challenges confronting regulators. In the taxation domain, these challenges included:

- the dramatic expansion of the reach of government regulation - extending across the wider community and into hitherto unregulated domains. This expansion had been prompted by the growth in the taxpayer base during and after the second world war, and also by the expansion of the substantive tax base during the 1980’s and 1990’s. In this context, the command and control concept of ‘chasing down every last cent’, although mythical,<sup>1</sup> was openly acknowledged to be an impossibility given the numbers of taxpayers under a mass taxation system;<sup>2</sup>

---

\* Senior Lecturer in Law at Law School, University of Canberra, Canberra, Australia; Visting Fellow, REGNET, Australian National University, Canberra, Australia. Email: mark.burton@canberra.edu.au.

<sup>1</sup> For discussion of the revenue maximizing culture of the Australian Taxation Office of the 1980’s, which saw ‘small’ taxpayers with relatively simple taxation breaches prosecuted in preference to ‘big’ taxpayers with complicated tax arrangements, see Peter Grabosky and John Braithwaite, *Of Manners Gentle*, Oxford University Press, Melbourne, 1986, 161ff. Grabosky and Braithwaite cite R Redlich, *Annual Report of the Special Prosecutor 1983-4*, AGPS, Canberra, 1984: ‘The Taxation Office too often elected not to unravel the corporate structure which a criminal employed to hide his assets because Tax officers could spend that time dealing with straightforward returns of other taxpayers and thereby recover the same or greater revenue.’ (at 131).

<sup>2</sup> Trevor Boucher, ‘Risk Management on a Market Segmented Basis’ in Peter Grabosky and John Braithwaite (eds), *Business Regulation and Australia’s Future*, Australian Institute of Criminology, Canberra, 1993, 231 at 232. For academic discussion of this point see: Peter Grabosky and John Braithwaite, *Of Manners Gentle*, Oxford University Press, Melbourne, 1986.

- the expansion of the public scrutiny of government, arising from the open government reforms of the 1980s, including freedom of information laws and the creation of additional avenues for public sector review;<sup>3</sup>
- the impact of neoliberal ideology, which brought to the fore the ‘business’ of government – the public were now ‘clients’;<sup>4</sup> performance appraisals of objectively defined outcomes became routine<sup>5</sup> and public servants were incentivised with remuneration ‘at risk’. The discipline of defining performance outcomes meant that the doctrine of strict enforcement of the law was expressly rather than implicitly overlooked in favour of a managerial discretion as to the best deployment of limited resources;<sup>6</sup> and
- the neoliberal wave of small government thinking<sup>7</sup> saw governments disguising the amount and nature of ‘public’ intervention in ‘private’ affairs by promoting self-regulation, as with the introduction of a self assessment tax system. Such self-regulation saw state power diffused throughout the community as taxpayers assumed greater responsibility for tax compliance. A command and control conception of state power was inapt in describing this new era of governmentality.<sup>8</sup>

Public sector agencies were therefore squeezed by small government rhetoric at a time when, paradoxically, more was being demanded of them. In this context ‘responsive regulation’ promised a regulator’s nirvana – retention of existing substantive policy, greater accountability, enhanced compliance with the law *and* public sector efficiency dividends. This optimal regulatory outcome could be achieved, it was argued, by creating regulatory partnerships between regulators and regulatees which would leave the community largely to regulate itself,<sup>9</sup> with the regulatory ‘big sticks’ wielded by the regulator for those few who demonstrated the most egregious of non-compliant behaviour.

There is a wealth of literature regarding the nature, implementation and operation of responsive regulation programs, yet some of the fundamental concepts upon which responsive regulation is constructed remain ill-defined. One critical aspect of the responsive regulation literature is that it assumes that the law is determinate. This assumption is critical to the concept of responsive regulation because responsive regulation is constructed upon a dualistic paradigm of compliance and non-

<sup>3</sup> For discussion of which see: J Goldring, ‘The Accountability of Public Administration and the Rule of Law in Australia’ (1981) 1 *Lawasia* (NS) 326; J Goldring, ‘The Foundations of the “New Administrative Law” in Australia’ (1981) 40 *Australian Journal of Public Administration* 79.

<sup>4</sup> For discussion of this see Mark Redmond, ‘Is the Taxpayer Really Revenue’s Customer?’ *The Sunday Business Post*, 29 May 2005; John Prebble, ‘Customers, branding, mottoes and the New Zealand inland revenue department’ in Michael Walpole and Chris Evans (eds), *Tax Administration in the 21<sup>st</sup> Century*, Prospect, Sydney, 2001.

<sup>5</sup> Anuphan Kitnitchiva, ‘Accountability and Fairness in Tax Administrations – A Case Study of the Thailand Revenue Department’ (2006) *Asia Pacific Tax Bulletin* (Mar/Apr) 76.

<sup>6</sup> Now incorporated in the Financial Management and Accountability Act 1997. For discussion of the approach to risk management adopted by the Australian Taxation Office in the early 1990’s see: Trevor Boucher, ‘Risk Management on a Market Segmented Basis’ in Peter Grabosky and John Braithwaite (eds), *Business Regulation and Australia’s Future*, Australian Institute of Criminology, Canberra, 1993, 231.

<sup>7</sup> See, for example, Milton Friedman and Rose Friedman, *Free to Choose*, Penguin Books, Harmondsworth, 1980.

<sup>8</sup> Mitchell Dean, *Governmentality: power and rule in modern society*, Sage, London, 1999.

<sup>9</sup> T Boucher, above n 2.



compliance. Regulators need to be able to identify non-compliance so that they can adopt an appropriate regulatory response. However, even when proponents of responsive regulation acknowledge that the law is indeterminate, they do not consider the implications of legal indeterminacy for the responsive regulation paradigm. If the law is indeterminate, and in section 3 I argue that there are good reasons for accepting that at least some tax law is of indeterminate meaning, then the operation of the responsive regulation model in the domain of taxation law is open to question. If a significant challenge confronting tax administrators is the 'management' of taxpayer behaviour under indeterminate law, as at least one former Commissioner candidly acknowledged,<sup>10</sup> the dualistic compliance paradigm of responsive regulation must be reconsidered. Framing the relationship between regulator and regulatee in terms of a partnership in an indeterminate legal domain is problematic for a number of reasons. The identity of the partners, the relative bargaining power of the partners, the capacity of the regulator to resist regulatory capture or enrapture, and the preservation/enhancement of the legitimacy of the taxation system in the secretive and hence opaque domain of taxation law are all issues which, it will be argued below, have not been adequately addressed in the cooperative compliance literature.

It is possible that failure to address such issues means that the cooperative compliance model has not generated the desired regulatory nirvana that was promised and the failure to address these issues may be counterproductive. For example, the public may perceive 'partnerships' with demographic taxpaying groups such as large corporate taxpayers as yet another example of 'the rich not paying their fair share'.<sup>11</sup> If so, Australia might yet again revisit the dark days of the 1970's in which the legitimacy of the taxation system was threatened.<sup>12</sup> Further, even if the cooperative compliance paradigm does engender a stronger awareness of an obligation to pay a 'fair share' of the nation's tax, it is not clear whether this attitudinal shift translates into the behaviour of taxpayers who adopt 'less aggressive' tax compliance postures when they encounter indeterminate law. This is because there is not necessarily any consistency between general attitudes towards the tax system or the tax administration and specific behaviours in particular contexts.<sup>13</sup> If Braithwaite is right in suggesting that context-specific attitudes must be linked to context specific-behaviours,<sup>14</sup> there is clearly a need to consider the effectiveness of the cooperative compliance model in altering taxpayer behaviour in specific contexts. Without such analysis, it is possible that taxpayers will cherry-pick tax administration advantages proffered by the ATO in its efforts to build community partnerships, while 'playing for the grey' in other contexts. After all, the existence of any positive effect of the cooperative compliance

---

<sup>10</sup> Id.

<sup>11</sup> Valerie Braithwaite, *Perceptions of Who's Not Paying Their Fair Share*, Working Paper No 54, Centre for Tax System Integrity, Canberra, 2004.

<sup>12</sup> Margaret Levi, *Of Rule and Revenue*, Uni of California Press, Berkeley, 1988.

<sup>13</sup> DS Massey, 'A Brief History of Human Society: The Origin and Role of Emotion in Social Life' (2002) 67 *American Sociological Review* 1; cited in Valerie Braithwaite, 'Dancing with Tax Authorities', in Valerie Braithwaite (ed), *Taxing Democracy*, Ashgate Publishing, Ashenden, 2003, 17.

<sup>14</sup> Valerie Braithwaite (ed), above n 13, 17; citing M Fishbein and I Ajzen, 'Attitudes Toward Objects as Predictors of Single and Multiple Behavioural Criteria' (1974) 81 *Psychological Review* 59; S Epstein, 'Aggregation and Beyond: Some Basic Issues on the Prediction of Behavior' (1983) 51 *Journal of Personality* 360.

model, in terms of tax administration efficiency, is open to question given that the cost of raising each \$100 of tax revenue has increased over the past decade.<sup>15</sup>

One purpose of this paper is to explore the implications for the responsive regulation paradigm if one accepts, as I argue we must, that at least some tax law is of indeterminate meaning. The second purpose of this paper is to suggest future directions for quantitative and qualitative research with a view to quantifying the significance of these implications for the cooperative compliance model in its day to day operation.

## 2. WHAT IS RESPONSIVE REGULATION?

### 2.1 A definition

The concept of ‘responsive regulation’ entails administration of determinate law by officials who tailor their regulatory behaviour according to the compliance posture adopted by individuals subjected to the relevant law.<sup>16</sup> The hallmark of responsive regulation is the pursuit of cooperation by the regulatee with the regulator:

Regulatory pyramids offer the advantage of handing tax officers a set of tools that can be applied without having to have a detailed understanding of why non-compliance has occurred. One starts with the expectation of co-operation; escalation on the pyramid occurs only when one sees the other defaulting and becoming non-co-operative.<sup>17</sup>

The compliance pyramid depicted by the Commissioner in his *Compliance Strategy*<sup>18</sup> reflects his interpretation of responsive regulation in the taxation domain.<sup>19</sup> For taxpayers who adopt a posture of ‘voluntary compliance’,<sup>20</sup> responsive regulation entails the provision of assistance in enabling taxpayers to understand and comply with the law. However, for taxpayers who adopt a posture of ‘resistance’, the tax administrator will consider deploying an escalating range of enforcement measures in achieving compliance. As taxpayers exhibit increasing resistance to ‘cooperation’, under the ‘tit for tat’ principle<sup>21</sup> the Commissioner responds with escalating enforcement powers.

### 2.2 Voluntary Compliance and Legitimacy

Promoting voluntary compliance generates public sector efficiency gains because the governed become voluntarily complying self-governors, thereby enabling the

<sup>15</sup> Commonwealth of Australia, *The Commissioner of Taxation Annual Report 2004-05*, Australian Taxation Office, Canberra, 2006, 11 (Fig 1.9). Of course, there is an infinite array of variables which might produce this outcome and mask the fact that the cooperative compliance model is reaping efficiency dividends.

<sup>16</sup> N Gunningham and P Grabosky, *Smart Regulation: Designing Environmental Policy*, Clarendon, Oxford, 1998; J Braithwaite, *Restorative Justice and Responsive Regulation*, Oxford University Press, New York, 2002.

<sup>17</sup> V Braithwaite and J Braithwaite, ‘Managing taxation compliance: the evolution of the Australian Taxation Office compliance model’ in M Walpole and C Evans (eds), *Tax Administration in the 21<sup>st</sup> Century*, Prospect, Sydney, 2001 at 218.

<sup>18</sup> Commonwealth of Australia, *2006-07 Compliance Program*, Australian Taxation Office, Canberra, 2006, 3.

<sup>19</sup> For discussion of the history of the adoption of the concept of responsive regulation in the taxation domain, see: V Braithwaite and J Braithwaite, above n 17.

<sup>20</sup> For consideration of the nature of ‘voluntary compliance’ see section 3.2 below.

<sup>21</sup> Ian Ayres and John Braithwaite, *Responsive Regulation: Transcending the Deregulation Debate*, Oxford University Press, New York, 1992, 26-7.

regulatory agency to devote its limited enforcement resources to those exhibiting resistant postures. Tyler's work suggests that voluntary compliance is enhanced by legitimacy, and in turn that legitimacy is enhanced if procedural fairness is adopted by regulatory agencies.<sup>22</sup>

There are various factors which might induce compliance with the law: the perceived risk of sanctions, peer/social pressure to comply, normative motivation founded upon a sense of obligation to comply with laws which accord with a person's sense of morality and/or a belief that the law/government is legitimate such that the law must be obeyed.<sup>23</sup> Tyler notes that reliance upon sanctions alone will be ineffective in achieving effective and efficient regulation of compliance. Further, Tyler notes that moral norms offer an unreliable basis for governments seeking to achieve compliance with the law – moral heterogeneity within any community makes it virtually impossible that most will agree with the morality of all law. Similarly, peer/social pressure are unreliable. By contrast, Tyler argues that legitimacy offers governments the promise of discretionary authority – people will obey the law, even if they disagree with the law, simply because they believe that the law must be obeyed.<sup>24</sup>

Accepting that individuals continue their membership of social groups for self-interested reasons, Tyler observes that individuals use their perceptions of procedural fairness as a proxy for substantive fairness:

The model that has been developed rests on an assumption that people ultimately care about issues of self-interest. In the context of organizational membership, simple short-term self-interest extends across a number of issues and over time. People want to feel that they will generally benefit from membership in the group. They judge whether they will by examining the procedures according to which allocations are made and disputes resolved. If the procedures are fair, people think they will receive positive outcomes.<sup>25</sup>

Tyler speculates that legitimization of government is socialized from an early age,<sup>26</sup> and argues that regulators should perceive their interactions with the public as opportunities to nurture that sense of legal obligation, legitimacy, amongst adults.

In the context of taxation law there is discretionary power on both 'sides' – taxpayers may choose their compliance posture while the Commissioner may choose his regulatory response from a suite of administrative powers. According to the responsive regulation literature, building cooperative compliance within this domain of discretion entails creating a regulatory relationship based upon trust.<sup>27</sup> Trust is defined as 'a relationship where the other player can be taken at his or her word, where there is a commitment to honest communication, to understand the needs of the other, to agreed rules of fair play and a preference for cooperation.'<sup>28</sup> By exhibiting trust, for example, the tax administration would encourage taxpayers to self-identify

---

<sup>22</sup> Tom Tyler, *Why People Obey Law*, Yale University Press, New Haven, 1990.

<sup>23</sup> For discussion of these motivators for compliance see Tyler, above n 22, 22ff.

<sup>24</sup> *Id.*, 25-6.

<sup>25</sup> *Id.*, 172-3.

<sup>26</sup> *Id.*, ch 12, 176ff.

<sup>27</sup> T Makkai and J Braithwaite, 'Procedural justice and regulatory compliance' (1996) 20 *Law and Human Behaviour* 83.

<sup>28</sup> Ayres and Braithwaite, above n 21, 86.

areas of tax compliance risk. Trusting the tax administration not to impose penalties arbitrarily, such taxpayers would seek the assistance of the administration in resolving these issues. Thus, the Commissioner has a broad discretion to remit administrative penalties<sup>29</sup> and has stated that remission of penalties generally is appropriate where the taxpayer has a good compliance record and has made an honest mistake.<sup>30</sup>

Signalling trust of a particular individual while indicating preparedness to exercise escalating powers of enforcement would seem contradictory, but legitimisation of the tax system is enhanced by indicating to individual taxpayers that the Commissioner’s enforcement powers will ensure that others will be compelled to comply with the law.<sup>31</sup> Thus, in addition to the definition of trust adopted by Ayres and Braithwaite, it seems that the nature of responsive regulation implies that trust also entails public confidence in the uniform application of the law across all taxpayers.

### 2.3 Partnership and responsive regulation

This foundation of trust underpins the discourse of deliberative democracy embodied within the responsive regulation paradigm. One of the innovative aspects of responsive regulation was that it purported to bring the discourse of deliberative democracy into the regulatory domain. This discourse holds that individuals with competing interests can be drawn to a consensus if preconditions to engagement in rational discussion are met.<sup>32</sup> This discourse of partnership entails tax administrators and taxpayers joining in ‘regulatory conversations’<sup>33</sup> regarding the implementation of ‘the law’.<sup>34</sup> Thus the discourse of tax administration incorporates the rhetoric of ‘partnership’ in preference to the discourse of distrust, confrontation and dispute characteristic of command and control regulation:

In short, the philosophy is one of a community based tax system where the ATO works in partnership with the community. It behoves the community to be involved in the tax system’s development, in its compliance and in its administration.<sup>35</sup>

The Taxpayers’ Charter reflects an attempt to frame the mutual obligations of the partners in this enterprise.

<sup>29</sup> *Taxation Administration Act 1953* (Cth) Sch 1 s 298-20.

<sup>30</sup> See for example Practice Statement PS LA 2004/5.

<sup>31</sup> Braithwaite and Braithwaite, above n 17, (2001, in Evans and Walpole), at 218.

<sup>32</sup> See, for example: Cass Sunstein, ‘Beyond the Republican Revival’ (1988) 97 *Yale Law Journal* 1713; James Fishkin, *Democracy and Deliberation: new directions for democratic reform*, Yale Uni Press, New Haven, Conn, 1991.

<sup>33</sup> John Braithwaite, ‘Rules and Principles – A Theory of Legal Certainty’ (2002) 27 *Australian Journal of Legal Philosophy* 47 at 71, citing Julia Black, ‘Talking about Regulation’ (1998) *Spring Public Law* 77.

<sup>34</sup> John Braithwaite, *Markets in Vice Markets in Virtue*, The Federation Press, Sydney, 2005, 150.

<sup>35</sup> Michael D’Ascenzo, ‘Tax Administration into the 21st century’ in Michael Walpole and Chris Evans, *Tax administration in the 21st century*, Prospect, 2001, 1 at 9. Australian Tax Office, *Improving Tax Compliance in the Cash Economy*, Australian Tax Office, Canberra, 1998; Michael Carmody, ‘Revitalising the tax administration system: the Australian experience’, Address delivered at Tax Administration Advisory Board Meeting, 11-12 January 2005, Phoenix, Arizona; Michael D’Ascenzo, ‘A new relationship with the tax profession’, Paper delivered at the 21<sup>st</sup> National Convention of the Taxation Institute of Australia, 6 April 2006; Michael D’Ascenzo, ‘Living our Values’, Addressed delivered at 7<sup>th</sup> International Tax Administration Conference, 20 April, 2006, Sydney; Michael D’Ascenzo, Relationships between tax administrators and tax agents/taxpayers’, Address delivered at the Asia-Oceania Consultants Association general meeting, 11 November 2005, Manila.

## 2.4 Community oversight of the partnership – passing the regulatory buck to public interest groups?

Recognising that the wider community has an interest in regulatory integrity and the potential for ‘partnership’ to be code for regulatory capture in some contexts, Ayres and Braithwaite proposed the institution of tripartism as the mechanism by which regulatory capture might be averted within a cooperative regulatory framework:

Tripartism is defined as a regulatory policy that fosters the participation of PIGs [public interest groups] in the regulatory process in three ways. First, it grants the PIG and all its members access to all the information that is available to the regulator. Second, it gives the PIG a seat at the negotiating table with the firm and the agency when deals are done. Third, the policy grants the PIG the same standing to sue or prosecute under the regulatory [58] statute as the regulator. Tripartism means both unlocking to PIGs the smoke-filled rooms where the real business of regulation is transacted and allowing the PIG to operate as a private attorney general.<sup>36</sup>

According to this model, one public interest group<sup>37</sup> would be appointed by the state or by a peak council of ‘public interest groups’ to sit at the regulatory table during negotiations between regulator and regulatee.<sup>38</sup> The appointment of just one public interest group representative is apparently justified upon the assumption that regulatory decision making is apolitical.<sup>39</sup> The extent of the resources required for adequate prosecution of this task is barely mentioned.<sup>40</sup> However, if considered a ‘weaker party’, the public interest group would be provided with resources ‘so that they can hire technically competent consultants to help them use that power effectively.’<sup>41</sup>

Under this tripartite model, Ayres and Braithwaite suggest, the regulatee could be expected to propose a low ball regulatory outcome while the public interest advocate would be expected (for reasons which are not apparent) to propose a high ball regulatory outcome which exceeded the will of the legislature expressed in the legislation. In such circumstances, the regulator would perform the ‘good cop/bad cop’ routine and oversee resolution of this dispute by brokering an agreement with the regulatee at the mid-point ‘closer to the democratic will embodied in the law.’<sup>42</sup> Cooperation between the regulator and the regulatee could therefore flourish, because the nasty confrontational work was being performed by a public interest representative

<sup>36</sup> Ayres and Braithwaite, above n 21, 57-8.

<sup>37</sup> It is not clear what definition of ‘public interest group’ would be adopted. It is clear that a public interest group is one which represents ‘the community interest’, but it is not clear whether this would exclude business lobby groups, for example.

<sup>38</sup> Ayres and Braithwaite, above n 21, 58.

<sup>39</sup> Ayres and Braithwaite note that tripartism could be adopted in the legislative branch of government, but accept that ‘simple tripartism’ would ‘provide too narrow a basis for PIG participation’: Ayres and Braithwaite, above n 21, 58.

<sup>40</sup> ‘Activism by salaried PIG [public interest group] lawyers is probably needed.’: Ayres and Braithwaite, id, 84.

<sup>41</sup> Id, 59.

<sup>42</sup> Id, 82.

who, apparently routinely, would argue for an untenable interpretation of the relevant law.<sup>43</sup>

### 3. WHAT IS COMPLIANCE? LIBERAL LEGALISM, INDETERMINATE LAW AND THE CONCEPT OF COOPERATE COMPLIANCE

#### 3.1 What is “compliance” for the purpose of the cooperative compliance model?

In section 2.1 above it was noted that responsive regulation is depicted as a pyramid of increasingly uncooperative taxpayer postures and corresponding regulatory responses. The object of responsive regulation is to induce regulatees to gravitate to the base of the regulatory pyramid, where there is a cooperative, trusting partnership of regulatees and regulator. Although there is occasional and fleeting reference to legal ambiguity,<sup>44</sup> underpinning this model is the assumption that law is determinate.<sup>45</sup> Thus, government makes what Valerie Braithwaite describes as ‘direct requests’, and the regulatee can be said to have ‘complied’ if they act in accordance with that request.<sup>46</sup> Escalation up the compliance pyramid will be considered when a taxpayer exhibits ‘uncooperative behaviour’ - action not in accordance with the direct request - irrespective of the motivation of that behaviour.<sup>47</sup> The determinacy of the law means that escalation up the enforcement pyramid for ‘uncooperative’ taxpayers is legitimated by the mutual recognition of what the law requires.

There are different forms of compliance. Taxpayers at the base of the compliance pyramid are said to ‘voluntarily’ comply because they submit to or even adopt the compliance culture of the tax administration,<sup>48</sup> while those at the pinnacle of the pyramid are subject to enforced compliance.

#### 3.2 Cooperative compliance and liberal political theory – the keystone of determinate law

Emphasising cooperation in defining compliance raises the possibility that ‘compliance’ will be confused with submission to a dominant will.<sup>49</sup> From the perspective of liberal political theory, which is ever alert to the possibility of illegitimate state intervention in the private domain, the concept of ‘cooperative compliance’ is fraught with risk.<sup>50</sup> Liberals believe that, as much as possible, individuals should be allowed to pursue their respective concepts of the good life with minimal interference from others, including the state.<sup>51</sup> Thus, liberal political theory

<sup>43</sup> At this point it is worth observing that Ayres and Braithwaite have duplicated the existing system of dispute resolution in which the regulator is conceived of as an impartial umpire – much the same as a judge who ‘finds’ the right meaning of the law under the ‘fairytale’ view of liberal legalism.

<sup>44</sup> Valerie Braithwaite, ‘Dancing with Tax Authorities: Motivational Postures and Non-compliant Actions’ in Valerie Braithwaite (ed), above n 13, 15 at 17.

<sup>45</sup> For discussion of this see section 3.2 below.

<sup>46</sup> Valerie Braithwaite, ‘Tax System Integrity and Compliance’ in Valerie Braithwaite (ed), above n 13.

<sup>47</sup> Braithwaite and Braithwaite, above n 17, 218.

<sup>48</sup> See the extract accompanying n 96 below.

<sup>49</sup> For early discussion of the concept of regulatory capture see: George Stigler, ‘The theory of economic regulation’ (1971) 2 *Bell Journal of Economics and Management Science* 3; Sam Peltzman, ‘The growth of government’ (1980) 23 *Journal of Law and Economics* 209. For further discussion of regulatory capture see section 4.4 below.

<sup>50</sup> G de Q Walker, *The Tax Wilderness: How to restore the rule of law*, Centre for Independent Studies, Melbourne, 2004; see also Geoffrey de Q Walker, *The Rule of Law: Foundation of Constitutional Democracy*, Melbourne University Press, Melbourne, 1988.

<sup>51</sup> Isaiah Berlin, ‘Two Concepts of Liberty’ in Isaiah Berlin, *Four Essays on Liberty*, Oxford University Press, Oxford, 1969; Ronald Dworkin, ‘Liberalism’ in Stuart Hampshire (ed), *Public and Private*

holds that the state must be neutral as to competing conceptions of the good life, because favouring one conception over another would be oppressive and hence be an illegitimate exercise of state power.<sup>52</sup> There are competing understandings of how this principle of state neutrality should be adopted in practice, with some accepting it entails state compliance with formal procedures laid down in a ‘rule of recognition’,<sup>53</sup> while others hold that state legitimacy hinges upon compliance with some substantive principle of neutrality (ie promoting efficient private markets). Nevertheless, it is clear that the norm of state neutrality dictates that ‘the law’ is applied uniformly across all legal subjects because the imperfect administration of a ‘neutral’ law is as evil as a non-neutral law.

This requirement that the law be administered neutrally means that a community must be able to define compliance by reference to an objective standard which is independent of the behaviour of the participants in the process. That is, the meaning of the law must be clear such that state oppression through wrongful exercise of state power is as readily ascertainable as a state’s failure to impose the law upon all subjects (as arises in the case of regulatory capture). Mindful that ‘responsive regulation’ might be interpreted as code for arbitrary regulation, Ayres and Braithwaite accept that the thesis of determinate law, which underpins the rule of law, is an integral feature of responsive regulation:

Although we have seen the virtues of giving regulatory agencies big guns, it is crucial that the state set limits on the maximum sanctions that can be imposed and on the offenses for which they can be applied. Obviously, the rule of law is needed as protection against the excesses that we have seen from regulators with the backing of the ruling party in countries such as China, excesses that have included execution and arrest without trial. The rule of law is not only essential to a republican regulatory order, it is definitional of it (Braithwaite and Pettit, 1990: 54-136).<sup>54</sup>

However, it is clear that there is no consensus within the responsive regulation literature upon how the one determinate legal meaning is to be ascertained, and nor is there universal acceptance of the fact that the determinate, objective legal meaning need be exogenous of the regulatory agency. Nevertheless, there is a consensus upon the proposition that ‘there is one legal meaning’ such that regulatees know whether they are complying or not. Thus, at different points in the literature associated with cooperative compliance:

- it is said that non compliance occurs where there is a departure from ‘what the ATO regards as the policy purposes of the parliament’s tax laws’;<sup>55</sup>

---

*Morality*, Cambridge Uni Press, Cambridge, 1978; Robert Nozick, *Anarchy, State and Utopia*, Basic Books, 1974.

<sup>52</sup> For discussion of this aspect of liberalism see: R Bruce Douglas, Gerald M Mara and Henry S. Richardson, *Liberalism and the Good*, Routledge, New York, 1990; Bobby Jindal, ‘Relativism, Neutrality and Transcendentalism: Beyond Autonomy’ (1997) 57 *Louisiana Law Review* 1253.

<sup>53</sup> See, for example, discussion of this in HLA Hart, *The Concept of Law*, Clarendon, Oxford, 1961, ch vi.

<sup>54</sup> Ayres and Braithwaite, above n 21, 53.

<sup>55</sup> John Braithwaite, op cit n 56, 179; see also Valerie Braithwaite, ‘Tax System Integrity and Compliance: The Democratic Management of the Tax System’ in Valerie Braithwaite, above n 13, ch 13 at 276ff, esp 278 (‘or if the regulatee gives the request meaning that undermines the intent of the regulator (e.g., playing for the grey in tax law)’); Doreen McBarnet, ‘When Compliance is not the Solution but the Problem’, in Valerie Braithwaite (ed), above n 13, 229 at 234 ‘...override claims to

- the definition of compliance suggested by James and Alley is adopted. This definition holds that compliance entails ‘the willingness of individuals and other taxable entities to act ... within the spirit as well as the letter of tax law and administration, without the application of enforcement activity’;<sup>56</sup>
- the Australian Taxation Office adopted what John Braithwaite labeled a literalist approach<sup>57</sup> to defining compliance, quite possibly drawing upon the definition adopted by Roth, Scholz and Witte;<sup>58</sup>
- on occasion the Australian Taxation Office adopts a ‘purposive’ approach to the interpretation of taxation law;<sup>59</sup>
- the Australian Taxation Office appears to adopt a theory of legislative meaning which incorporates both pragmatic and purposive elements;<sup>60</sup> and
- the Commissioner of Taxation appears to acknowledge multiple paths to identifying statutory meaning and suggests that the ‘purpose’ of the legislation should prevail without acknowledging that the legislative purpose may be indistinct.<sup>61</sup>

Clearly the concept of the rule of law, and in particular the determinacy of law, is definitional of responsive regulation because responsive regulation depends upon everyone knowing who the ‘cheats’<sup>62</sup> are, who the ‘socially responsible’<sup>63</sup> regulatees are and how ‘gaps’ in the letter of the law ought be resolved,<sup>64</sup> such that escalation up the compliance pyramid for recalcitrants will be legitimate.<sup>65</sup>

Within this literature the possibility of different interpretations of the law is acknowledged occasionally. However, it seems to be accepted that in such cases the regulatee’s interpretation generally will be acknowledged to be wrong because it is inconsistent with the regulator’s ‘right’ interpretation.<sup>66</sup> At this point it should be

---

compliance based on the letter of the law, rather than on what those producing or enforcing the law see as its spirit’.

<sup>56</sup> Ayres and Braithwaite, above n 21, 26-7, 60; Valerie Braithwaite, above n 13, 24; John Braithwaite, ‘Large Business and the Compliance Model’ in Valerie Braithwaite, above n 13, 177-8; Doreen McBarnet, ‘When Compliance is not the solution but the problem: From Changes in Law to Changes in Attitudes’ in the same volume, 229-30; see also Commonwealth of Australia, *The Australian Taxation Office’s Management of Aggressive Tax Planning*, Australian National Audit Office Report No 23 2003/2004, AGPS, Canberra, 2004, 24. For discussion of the concept of practical compliance see: Michael Carmody, ‘The Art of Tax Administration: Two Years On’ in Rodney Fisher and Michael Walpole, *Global Challenges in Tax Administration*, Fiscal Publications, Bath, 2005, 5 at 7.

<sup>57</sup> John Braithwaite, ‘Large Business and the Compliance Model’ in Valerie Braithwaite (ed), above n 13, 177 at 177.

<sup>58</sup> ‘Compliance with reporting requirements means that the taxpayer files all required tax returns at the proper time and that the returns accurately report tax liability in accordance with the Internal Revenue Code, regulations, and court decisions applicable at the time the return is filed.’ J Roth, J Scholz and A Witte, *Taxpayer Compliance*, (vol 1) Uni of Pennsylvania Press, Philadelphia, 1989, 21.

<sup>59</sup> Commonwealth of Australia, *2006-07 Compliance Program*, Australian Taxation Office, 2006, Foreword (referring to ‘the objectives’ of the taxation system).

<sup>60</sup> Australian Taxation Office, *Integrity Framework*, Australian Taxation Office, Canberra, 2006, 8

<sup>61</sup> Michael D’Ascenzo, ‘Along the Road to Damascus: A Framework for Interpreting the Tax Law’ (2000) 3 *Journal of Australian Taxation* 384 cf Mark Burton, ‘Democratic Tax Administration’ in Margaret McKerchar and Michael Walpole, *More Global Challenges in Tax Administration*, Fiscal Publications, Bath, 2006 (forthcoming).

<sup>62</sup> Ayres and Braithwaite, above n 21, 26-7.

<sup>63</sup> Id

<sup>64</sup> Id, 27.

<sup>65</sup> For a discussion of the concept of legitimacy see: Tyler, above n 22, ch 1.

<sup>66</sup> As is most clearly seen in the first dot point in the preceding list.



noted that if the ‘right’ interpretation is governed by the regulator’s interpretation of the law, it is difficult to see how the rule of law is definitional of responsive regulation, because this would make regulators judges in their own cause and lay the way for autocratic power, which Ayres and Braithwaite expressly disavow.<sup>67</sup>

However, for present purposes it is clear that determinate meaning of authorized legislative texts, as determined by one means or another, is central to the operation of responsive regulation. There is little point in revisiting the substantial literature regarding the limitations of this liberal legalism.<sup>68</sup> However there are two salient aspects of liberal legalism which are particularly relevant to the ensuing discussion of responsive regulation:

1. a central aspect of liberal legalism is the proposition that a legislative text, created in accordance with the appropriate ‘rule of recognition’, constitutes law and is the focus of any interpretive inquiry. The interpretation of the text is not an open-ended inquiry into what is ‘right’ – it is the quest for the one ‘right’ legislative meaning. Finding the one right meaning of the text means that the consideration of the moral aspects of competing interpretations is just as irrelevant as perceptions of the various pragmatic consequences of differing interpretations.

Under the paradigm of responsive regulation, then, a person is not a ‘cheat’ if they ‘buy’ a legislated tax favour through ‘lobbying’ and/or clandestine political deals.<sup>69</sup> From this perspective, such legislated deals are legitimate because they are ‘the law’ and are therefore apparently assumed to express the ‘democratic will’.<sup>70</sup> The opacity of the legislative process and the myopia of ‘the people’ are ignored.<sup>71</sup> By contrast, a person who does not procure such legislative favours is a ‘cheat’ if they do not ‘cooperate’ with what they perceive to be a defective law which has emerged from a defective process driven by the machinations of powerful interest groups.

Liberal legalism therefore dictates that we ignore the prospect that people might be cynical about the origins of a law and hence be cynical about the justice and fairness of a law. By adopting this legal formalism, Tyler and others within the responsive regulation fold have focused our attention upon the legitimization of the tax administration, rather than upon the legitimacy of the government’s taxation institutions and the substantive law more generally.<sup>72</sup> However, if the law is indeterminate, it is possible that taxpayers look beyond administrative procedural fairness; and

2. legal formalism lends itself to a top-down, command and control theory of state power. Under this paradigm, state power is concentrated in state institutions

<sup>67</sup> Ayres and Braithwaite, above n 21, 53.

<sup>68</sup> For discussion of the concept of legal formalism, and its limitations, see Duncan Kennedy, ‘Legal Formality’ (1976) *Journal of Legal Studies* 351; J. Shklar, *Legalism*, Cambridge Mass 1964.

<sup>69</sup> Dan Roberts, ‘GE surges as tax breaks cut in’, *The Australian*, 24 January 2005, 28.

<sup>70</sup> Ayres and Braithwaite, above n 21, 82.

<sup>71</sup> The limitations of the legislative process in Australia were considered, albeit in the limited context of small business tax concessions, in: Mark Burton, ‘The Australian small business tax concessions – public choice, public interest or public folly’ (2006) 21 *Australian Tax Forum* 91. See also Mark Burton, ‘Chaos, Rhetoric and the Legitimation of ‘Democratic’ Government – A Critical Review of the Australian Tax Legislative Process’ (2007) *Sydney Law Review* (forthcoming).

<sup>72</sup> Tom Tyler, *Why People Obey the Law*, Princeton University Press, Princeton, 2006, 262.

because the source of the power is the clear meaning of the legislative texts and the state determines how that power is exercised. The exercise of power under legislation might be delegated to others who are traditionally considered to fall outside of ‘the state’, as under the concept of meta-risk management,<sup>73</sup> but such delegations of power can be revoked. Always, in the background, lies the omnipotent state, overseeing the exercise of ‘its’ power legitimated by the community’s understanding of legislative meaning.

However, if the meaning of legislation is indeterminate and hence contestable (and often contested), the state is engaged in a process by which its power is contingent, in which its power is defined according to the specific context. Thus, in regulating indeterminate taxation law, different taxpayers might exert more or less influence vis a vis the tax administration in interpretive contests.

#### 4. THE INDETERMINACY OF LAW

The concept of responsive regulation therefore hinges upon the existence of determinate legislative meaning. However, there are three reasons to question whether such determinate legal meaning exists.

##### 4.1 Variability of interpretive method

The first is the fact that there are various means of identifying the ‘true meaning’ of a legal text. As Wittgenstein noted,<sup>74</sup> words do not have a finite meaning independent of their context. Instead, words assume a meaning within a particular context. In light of this insight, different interpretive methods have been developed which define the relevant context differently. There are, for example, multiple definitions of what a ‘literalist’ approach to statutory interpretation entails, each one adopting a different rule as to the nature of the context which should be considered in pursuing a literalist interpretation. Similarly, there are various understandings of what a purposive approach entails.<sup>75</sup>

Recognition of the existence of multiple interpretive paths indicates that compliance cannot be objectively determined in many cases – this is not a case of all interpretive roads leading to Rome. McBarnet’s concept of ‘creative compliance’,<sup>76</sup> for example, acknowledges that different interpretive paths produce different plausible meanings. Similarly, the vagaries of the compliance concept have been acknowledged by various proponents of cooperative compliance, including the Commissioner of Taxation (albeit rarely),<sup>77</sup> Valerie Braithwaite<sup>78</sup> and John Braithwaite.<sup>79</sup>

<sup>73</sup> Christine Parker, *The open corporation: effective self-regulation and democracy*, Oxford University Press, Melbourne, 2002; For discussion of the application of Parker’s work in the context of taxation law see: John Braithwaite, ‘Meta Risk Management and Responsive Regulation for Tax System Integrity’ (2003) 25 *Law & Policy* 1.

<sup>74</sup> Ludwig Wittgenstein, *Philosophical Investigations*, trans G.E.M. Anscombe, Basil Blackwell, Oxford, 1968 (3<sup>rd</sup> edn).

<sup>75</sup> Mark Burton, ‘The Rhetoric of tax interpretation – where talking the talk is not walking the walk’ (2005) 3(1) *Journal of the Australasian Tax Teachers Association* 1.

<sup>76</sup> Doreen McBarnet, ‘When Compliance is not the Solution but the Problem: From Changes in Law to Changes in Attitude’ in Valerie Braithwaite, *Taxing Democracy*, 229 at 230.

<sup>77</sup> See, for example: Commonwealth of Australia, *Cooperative Compliance: Working with Large Business in the New Tax System*, Australian Taxation Office, Canberra, 2000, 6; Commonwealth of Australia, *Large Business and Tax Compliance*, Australian Taxation Office, Canberra, 2006, 10.

<sup>78</sup> Braithwaite, above n 13, 4.

<sup>79</sup> John Braithwaite, above n 34, ch 10 (acknowledgement that tax law needs to be made more certain).

Apparently in recognition of this threat to responsive regulation, John Braithwaite has argued that the tax law can be made ‘more certain’ by adopting a combination of legislative principles and legislative rules. This legislative framework, Braithwaite suggests, would promote a purposive approach to legislation.<sup>80</sup> Under this approach, legislation would comprise core principles (such as ‘safe driving in light of road conditions’)<sup>81</sup> and specific elaborations of these principles (‘rules’ – such as ‘you cannot exceed 80 kilometres per hour in a speed zone marked as such’). In the event of conflict, principles would trump rules. According to Braithwaite, a driver would know that they would not face regulatory action while driving under the prescribed speed in an 80km/h speed zone ‘in normal circumstances’<sup>82</sup> or provided that there were no ‘unusually dangerous conditions’.<sup>83</sup> However, in ‘abnormal circumstances’ the driver would know that they must comply with the principle.

There are two aspects of this proposal which indicate that it may not provide a smooth road to legislative certainty:

1. Braithwaite appears to assume that a principle has a determinate meaning, when this is not necessarily the case. Whether one talks of ‘principles’ or ‘rules’, both must be expressed in language which is, as I have suggested above, of indeterminate meaning. The meaning of a principle can be just as elusive as the meaning of a rule. Thus, for example, Braithwaite suggests that a general anti-avoidance rule is an example of a ‘principle’ which should be adopted under his model. However, the difficulty of identifying the meaning of this ‘principle’ is illustrated by the case law. For example, the recent High Court decision in *FCT v Hart*<sup>84</sup> left unresolved the meaning of the definition of ‘scheme’ in ITAA36 s 177A(1).<sup>85</sup>

Taking Braithwaite’s example of traffic regulation, in the absence of an exhaustive definition of what constitutes ‘normal circumstances’ and/or ‘unusually dangerous conditions’, a driver would be well advised to seek compliance with the principle and ignore the rule. But the vagaries of applying such a principle as ‘drive carefully’ in specific contexts mean that reasonable people will reasonably disagree about what the principle means in any one context. After all, there is a very real possibility that different people will adopt different interpretive standpoints when interpreting the principle, a prospect which I address in section 4.2 below; and

2. the interaction of rules and principles under Braithwaite’s model can be expected to create uncertainty, rather than resolve it. Giving principles such as ‘safe driving’ priority over rules (‘drive within the stated speed limit’) leaves the way open for drivers who exceed the speed limit to argue that they were complying with the principle. The driver of a car with high performance brakes, collision detection and evasion technology and so forth might quite reasonably argue that they were driving ‘safely’. They might quite plausibly argue that they were driving more safely than the person in the adjacent lane whose reflexes are slowed because she/he has consumed some alcohol (but is within the legal limit)

---

<sup>80</sup> Id.

<sup>81</sup> Id, 144.

<sup>82</sup> Id, 145.

<sup>83</sup> Id, 145.

<sup>84</sup> *FCT v Hart* (2004) 217 CLR 216.

<sup>85</sup> Justin Dabner and Mark Burton, ‘Hart – the death of tax planning?’ (2004) *CCH Tax Week* 373.

and who is driving a fully laden old car which has outmoded brakes and suspension. It is possible Braithwaite’s interpretive model means that the law is no more certain than under any of the existing interpretive approaches adopted by the courts.

#### 4.2 No consensus regarding interpretive standpoint

The second source of legal indeterminacy is that there is no consensus regarding the appropriate interpretive standpoint.

In view of the various approaches to defining the context of legislation for the purposes of ascertaining its meaning, it would be possible for a community to (somehow) agree that ambiguity should be resolved by recourse to one interpretive standpoint such as ‘adopt the meaning which is most efficient in an economic sense’. Thus, Ayres and Braithwaite describe their concept of ‘regulatory republicanism’ in which an ‘enlightened’ private sector and an informed public sector engage constructively in deliberative dialogue.<sup>86</sup> This draws upon the communicative theories of Habermas<sup>87</sup> and Sunstein<sup>88</sup> which posit that rational conversations will tend to produce determinate meaning. However, there is good reason to question whether consensus can be reached when the participants in a shared conversation hold incommensurable standpoints.<sup>89</sup> Ayres and Braithwaite seem to acknowledge this issue, without adequately addressing it, when they express a preference for small group decision making upon the basis that it would ‘maximise the prospects of genuine dialogue around the table leading to a discovery of win-win solutions, instead of a babble of many conflicting voices talking past each other.’<sup>90</sup>

Such standpoint incommensurability may be seen in the literature regarding taxation law. Within this literature there are diametrically opposed standpoints regarding the interaction of the concept of private property with the nature of taxation:

- for those who adopt a communitarian perspective, all property belongs to the state and so ‘tax’ is not an imposition upon individuals but merely the portion of the state’s property which the state does not forego to private ownership.<sup>91</sup> To those who adopt this standpoint, the onus is upon the taxpayer to show why the government should not withhold its property from the taxpayer. Further, under this

<sup>86</sup> John Braithwaite, above n 34, 150.

<sup>87</sup> Jurgen Habermas, *Theory of Communicative Action* (vol 1), Thomas McCarthy (trans), Beacon Press, Boston, 1984; Jurgen Habermas, *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy*, William Rehg (trans), Polity Press, Cambridge, 1996.

<sup>88</sup> Cass R Sunstein, ‘The Republican Civic Tradition: Beyond the Republican Revival’ (1988) 97 *Yale LJ* 1539.

<sup>89</sup> Chantal Mouffe, ‘Democracy and Pluralism: A Critique of the Rationalist Approach’ (1995) 16 *Cardozo Law Review* 1533.

<sup>90</sup> Ayres and Braithwaite, above n 21, 58. This comment appears to conflict with the earlier endorsement of Sunstein’s four principles of deliberative decision making (at 18), and so may not be intended as a rejection of such principles. However, in discussing the problem of regulatory capture, Braithwaite and Ayres posit the regulator as an umpire sitting between the opposing interests of the regulatee and a public interest group representative: Ayres and Braithwaite above n 21, 81ff, esp 86.

<sup>91</sup> Liam Murphy and Thomas Nagel, *The Myth of Ownership: Taxes and Justice*, Oxford Uni Press, Oxford, 2000.

view, it is appropriate to interpret legislation in favour of the revenue, as the courts have done from time to time;<sup>92</sup>

- for many liberals, private property preexists any claim of the state and so a tax is an imposition upon individuals. This imposition might be cast in terms of an exchange contract – ‘taxes are what you pay for civilized society.’<sup>93</sup> Or it might be conceived in terms of a compulsory exaction which does not necessarily purchase public services – theft.<sup>94</sup> Under this view, the onus is upon the state to show why it should receive some of the taxpayer’s private property. Thus tax legislation is to be read restrictively because the government is compulsorily acquiring private property and has ample resources to accurately define the extent to which it will exact tax from its subjects.

The significance of these incommensurable standpoints is evident in the discussion of what constitutes ‘voluntary compliance’, a subject candidly considered in an Australian Taxation Office review of its Large Case Audit Program in 1992.<sup>95</sup> Although the extract below is long, it acknowledges that the concept of ‘voluntary compliance’ is contestable owing to the existence of incommensurable standpoints, and particularly where the law is accepted to be ‘grey’:

Large corporate taxpayers and the ATO define voluntary compliance, and thus tax due, differently. Most corporations desire and make substantial efforts to comply with the taxation law, while at the same time practising varying degrees of active tax planning in their goal to maximise returns to shareholders. The ATO’s view of compliance, on the other hand, is influenced by a conservative view of the law and the need to protect the tax base. With many grey areas of the taxation law, different perceptions of tax due on the part of corporations and the ATO are inevitable. In fact, these grey areas account for more than half of all debits collected by the program, while the remainder is mostly attributable to legitimate disputes of fact or errors where the law is not in question.

Given these different perceptions, the term ‘voluntary compliance’ for this taxpayer group may be somewhat misleading. For other taxpayer segments, ‘voluntary compliance’ describes the readiness of the taxpayers to do the right thing – to accurately report their income and expenses and pay the tax due. On this definition, the largest corporations (the top 100) can be said to be highly compliant, as this taxpayer base, with rare exceptions, is not intending to evade tax. In fact, only one instance of tax evasion has been prosecuted for the LCP. Nonetheless, corporations still have a large motivation to minimize tax, which occurs most fruitfully in areas where the law is unclear. In this taxpayer group, the degree of ‘non-compliance’ is more a function of a lack of clarity in the tax law than inappropriate taxpayer behaviour. The key, therefore, to increased voluntary compliance by the

<sup>92</sup> See, for example, M Burton, ‘Reconciling the Rhetoric of Rights with the Pro-Revenue Construction of Tax Legislation in Eighteenth Century Britain’ (2003) 7 *Canberra Law Review* 27.

<sup>93</sup> *FCT v Spotless Services Ltd* 96 ATC 5201, 5206.

<sup>94</sup> See, for example, Eric Mack, ‘Self Ownership, Taxation, and Democracy: A Philosophical-Constitutional Perspective’ in Donald P. Racheter and Richard E. Wagner, *Limiting Leviathan*, Edward Elgar, Cheltenham, 1999, ch 2; for discussion of this discourse see: Marc Linder, ‘Eisenhower-Era Marxist Confiscatory Taxation: Requiem for the Rhetoric of Rate Reduction for the Rich’ (1996) 70 *Tulane L Rev* 905.

<sup>95</sup> Cited in Boucher above n 2, 237.

ATO definition is to narrow the gap between the ATO’s and corporate taxpayers’ interpretations of the law.<sup>96</sup>

According to the Australian Taxation Office, the concept of ‘voluntary compliance’ entails adoption of the Australian Taxation Office’s interpretation of the law in cases of legal ambiguity. In a more recent (albeit brief) discussion of the concept of ‘legal ambiguity,’ the Commissioner accepts that there may be differing plausible interpretations of the law which are consistent with the policy intent (apparently assuming that the policy intent is discernible and sufficiently finite as to guide the construction of textual meaning).<sup>97</sup> In such circumstances the Commissioner states that he adopts that interpretation which produces the lower compliance costs. What this more recent statement overlooks is the fact that the policy intent may not be clearly discernible and, even if it is discernible, it may be so general as to be of limited use in elaborating the meaning of statutory terms. The policy of ITAA97 Div 152, for example, offers little assistance in gleaning the meaning of ‘in connection with your retirement’ in section 152-105.<sup>98</sup> In such circumstances the resolution of statutory meaning by the Commissioner will be influenced by the perspective adopted. Often, but not always,<sup>99</sup> this will mean that a taxpayer will be obliged to adopt a communitarian perspective when interpreting the law. From this perspective, a taxpayer is obliged to pay as much tax as might possibly be payable under relevant taxation laws. That is, a taxpayer/tax agent who interprets ambiguous law in favour of the taxpayer is considered to have adopted an ‘aggressive’ tax position, while a taxpayer who interprets ambiguous law in favour of the revenue is considered to be an exemplary cooperator.

This approach to labeling taxpayers who adopt an individualist stance as ‘aggressive’ is also found in the academic literature. Thus, for example, Richardson and Sawyer adopt the definition of Roth and Scholz,<sup>100</sup> noting that:

Although this definition allows for both intentional and unintentional compliance, it does not clarify whether the taking of an aggressive tax position on an ambiguous issue represents non-compliance if the revenue authority or courts fail to accept the treatment at a later date.<sup>101</sup>

Note here that there is no necessary connection between the aggressivity of the position adopted and any subsequent reversal of that position by a court – implicit within the statement is acknowledgement of the possibility that an aggressive position might be approved by subsequent court decision. Asserting a favourable position on an issue of legal ambiguity is labelled ‘aggressive’ because it contravenes the

<sup>96</sup> Id.

<sup>97</sup> Commonwealth of Australia, Large Business and Tax Compliance, above n 77.

<sup>98</sup> See, for example: Commonwealth of Australia, *A Post-implementation Review of the Quality and Effectiveness of the Small Business Capital Gains Concessions in Division 152 of the Income Tax Assessment Act 1997*, The Board of Taxation, Canberra, 2005, 4.

<sup>99</sup> See the discussion in section 5.5 below.

<sup>100</sup> See above n 58.

<sup>101</sup> Maryann Richardson and AJ Sawyer, ‘A Taxonomy of the Tax Compliance Literature: Further Findings, Problems and Prospects’ (2001) 16 *Australian Tax Forum* 137 at 142. Adopting a favourable interpretation of ambiguous law and constructing a set of circumstances with a view to minimizing taxation, McBarnett’s ‘creative compliance,’ are quite different cases. Creative compliance might more readily be accepted to be ‘aggressive’ under both the communitarian and the contractarian view of taxation.

communitarian norm of paying as much tax as is possible which is, presumably, the ‘spirit of the law’.

The competing standpoints of communitarianism and private property mean that there are often competing interpretations of taxation law and, indeed, competing interpretations of the concept of ‘voluntary compliance’. Although there may be arguments for adopting communitarianism as a normative interpretive rule, such arguments have not received universal agreement. Indeed, given the cynical manipulation of substantive taxation law to the advantage of particular groups of taxpayers noted below,<sup>102</sup> it is doubtful that a communitarian ethic truly is the will of the people.

#### 4.2.1 Tripartism – basis for compromising incommensurable standpoints?

Ayres and Braithwaite implicitly suggest that their model of tripartism will resolve this problem of incommensurable standpoints. As noted in section 2.4 above, tripartism entails tripartite negotiation of regulatory outcomes in an environment of trust, which is defined to include a preference for cooperation.<sup>103</sup> Sitting between regulatee and public interest group representative, who respectively advocate opposing regulatory outcomes which are inconsistent with the law, it is envisaged that the regulator would broker a resolution which approximates ‘the democratic will’.

There are a number of theoretical and practical difficulties with this tripartite model:

- the most significant is that tripartism and the rule of law are mutually inconsistent. As noted above,<sup>104</sup> Ayres and Braithwaite indicated that the rule of law is definitional of responsive regulation. If so, there is no room for compromise regarding substantive regulatory outcomes. There may be room for compromise regarding how those outcomes are achieved, the imposition of penalties for non-compliance with determinate law (providing that such discretion is allowed under the relevant legislation) and such-like,<sup>105</sup> but the rule of law means compliance with determinate legal outcomes, not the brokering of deals;
- it may be that the commitment to ‘cooperation’ entails a commitment to striking a compromise, but it is not clear why an independent party would agree to ‘cooperate’ in this way if they genuinely believe that the law does not require such compromise. This problem is all the more salient because of the incommensurable standpoints which may underpin the discourse of regulator and regulatee.<sup>106</sup> In the absence of the protective shroud of the rule of law, tripartism could all too easily become state oppression of minorities and/or a cloak for regulatory capture. The failure to acknowledge the depth of the incommensurability challenge is also evident in the cursory suggestion that a compromise approximating ‘the democratic will’ will emerge.<sup>107</sup> Perhaps acknowledging the limitations of this

<sup>102</sup> See the discussion in section 4.3 below.

<sup>103</sup> See text accompanying n 28.

<sup>104</sup> See section 3.2.

<sup>105</sup> To some, such legislatively authorized discretions are anathema to the rule of law: de Q Walker, above n 50.

<sup>106</sup> Ayres and Braithwaite refer to this problem of incommensurability, but seem to suggest that deliberative dialogue will ‘orient our practical and political lives’ (citing Bernstein): Ayres and Braithwaite, above n 21, 97. They do not deal with the problem of deliberation being undertaken under duress and nor do they deal with the problem that some might not agree with deliberative dialogue.

<sup>107</sup> Ayres and Braithwaite, above n 21, 82.

suggestion, Ayres and Braithwaite suggest that the two parties might ‘take turns’ at losing.<sup>108</sup> Again, it is not clear why a party who genuinely believes that their interpretation of the law is right would agree to take their turn at losing; and

- other shortcomings of this tripartite model include doubts about how trust, defined to include a preference for cooperation, could survive if regulatee and PIG routinely adopt ambit claims which are beyond what all acknowledge to be ‘the democratic will’, whether public interest groups would have sufficient resources to prosecute their claims, whether there is any need for a tripartite regulatory domain given that the law is assumed to be determinate and how tripartism could operate in a mass taxation context.

Perhaps with these shortcomings in mind, it seems that Braithwaite has resiled somewhat from the original conception of tripartism. In his *Markets in Vice Markets in Virtue*<sup>109</sup> he suggests that tripartism was incorporated into the Australian Taxation Office’s cooperative compliance model by the reference to ‘building community partnerships’.<sup>110</sup> However, the discussion of building *bipartite* community partnerships in the Compliance Model is a far cry from the tripartism outlined by Ayres and Braithwaite, and so it is doubtful that ‘community partnerships’ embody tripartism. In any case, Braithwaite observes that tripartism has not been implemented as there has been no engagement with the community on a broad base.<sup>111</sup> Braithwaite therefore calls for an ‘assertive social movement politics’ which would, apparently, focus upon the tax profile of large corporations.<sup>112</sup> There is no discussion of what institutional changes would be necessary to engender such broad community oversight and in any case, it seems that tripartism is no closer to resolving the incommensurability of standpoints which its tripartite compromise of competing viewpoints promised.

### 4.3 Ad hoc legislation and the “spirit of the law”

As noted in section 3.2 above, some rely upon the spirit of the law<sup>113</sup> or the ‘logic and policy’<sup>114</sup> of the law as the basis upon which textual indeterminacy might be resolved. However, the third significant source of legislative indeterminacy is the fact that the tax legislation is riddled with myriad arbitrary rules and lacunae which defy identification of any logic, underlying purpose or ‘spirit’ of the law.<sup>115</sup> The widespread exploitation of tax loopholes during the 1970’s<sup>116</sup> prompted the introduction of the general anti-avoidance rules within Part IVA of the ITAA 1936. These rules purportedly protect the underlying purpose of the income tax law,<sup>117</sup> but arbitrary

<sup>108</sup> Id, 85.

<sup>109</sup> John Braithwaite, above n 34.

<sup>110</sup> Id, 73.

<sup>111</sup> Id, 73-4.

<sup>112</sup> Id, 207-8.

<sup>113</sup> Although tax advisors generally express some mystification as to what the ‘spirit of the law’ actually is: Roman Tomasic and Brendon Pentony, ‘Tax Compliance and the Rule of Law: From Legalism to Administrative Procedure?’ (1991) 8 *Australian Tax Forum* 85.

<sup>114</sup> Michael D’Ascenzo, ‘Along the Road to Damascus: A Framework for interpreting the tax law’ (2000) 2 *Journal of Australian Taxation* 384 at 389.

<sup>115</sup> For a critique of the policy failures of successive governments see Richard Krever, ‘Taming Tax Complexity’ (2003) 25 *Sydney Law Review* 367. For an earlier expression of a similar view see; Rick Krever, ‘Avoidance, Evasion and Reform: Who Dismantled and Who’s Rebuilding the Australian Income Tax System?’ (1987) 10 *UNSW Law Journal* 215.

<sup>116</sup> Margaret Levi, above n 12.

<sup>117</sup> Michael D’Ascenzo, above n 114.



rules, poorly framed tax concessions and tax loopholes continue to cloud any putative purpose, if one exists at all.

The Commissioner compounds the problematic identification of the underlying purpose of the law by sanctioning some arrangements which appear, at least to many tax practitioners, to have all of the hallmarks of ‘aggressive tax avoidance’. For example, in his Media Release<sup>118</sup> regarding superannuation recontribution arrangements the Commissioner indicated that the general anti-avoidance rules in Part IVA will not apply to common superannuation recontribution strategies. In essence, these strategies entail a taxpayer taking an eligible termination payment from a superannuation fund (which is subject to concessional taxation treatment)<sup>119</sup> and recontributing that payment to the superannuation fund as the ‘purchase price’ of a superannuation pension. The effect of this arrangement is that the assessable amount of the superannuation pension will be less by comparison to the case of a similar taxpayer who merely rolled over their superannuation entitlement within the fund (ie without taking the benefit as an eligible termination payment and then recontributing it). By entering into a superannuation recontribution arrangement, then, the taxpayer is arbitraging the (low) immediate tax liability against the present value of the future taxation savings.

Such planning opportunities arise because of departures from the core taxing principles. In this case, the taxpayer is only taxed upon a fraction of their economic income by virtue of section 27C. The substance of the alternative means of obtaining a pension is essentially identical – in both cases the taxpayer uses their superannuation entitlement to ‘purchase’ a retirement pension. However, the form is different – taking money out of the fund renders it liable to (low) taxation as an eligible termination payment,<sup>120</sup> and the after-tax amount of the ETP is immediately reinvested into the same superannuation fund. The alternative form simply entails the money being retained by the superannuation fund and applied to the payment of a pension to the member.

The Commissioner’s acceptance of formalist ‘tax planning’ evidenced in his approach towards superannuation recontribution arrangements appears to be contrary to the Commissioner’s general approach to the application of Part IVA. In Practice Statement 2001/15 the Commissioner observes that ‘aggressive tax planning’ exhibits any or all of a range of indicia, including arrangements which are contrived or artificial in their execution, have little or no real underlying business purpose and arrangements that use tax exempt entities to ‘wash’ income.<sup>121</sup> A superannuation recontribution arrangement appears to satisfy these indicia – the round robin payment, artificiality, and absence of non-tax justification for the arrangement and ‘washing’ income through a low tax entity are core aspects of the Commissioner’s definition of aggressive tax planning. It is therefore arguable that the Commissioner’s decision that Part IVA does not apply to at least some superannuation recontribution arrangements is inconsistent with the law which the Commissioner purports to uphold.

---

<sup>118</sup> Commissioner of Taxation, Media Release Nat 04/058, 4 August 2004. The Commissioner indicates that a public ruling on such recontribution strategies will be released in the near future.

<sup>119</sup> *Income Tax Assessment Act 1936* s 27C.

<sup>120</sup> *Income Tax Assessment Act 1936* s 27C.

<sup>121</sup> Commissioner of Taxation, ‘Law Administration’, Practice Statement 2001/15.

The favourable treatment of superannuation by the Commissioner may be explicable on public policy grounds, but this favourable treatment has no clear legislative basis. By sanctioning a formalist approach in the case of superannuation recontribution arrangements, the Commissioner is signaling that, in circumstances of his choosing, he will vary his usual approach to the general anti-avoidance rules. This apparently arbitrary application of the general anti-avoidance rules may foster cynicism among tax advisors. Indeed, anecdotal evidence indicates that at least some tax advisors had advised clients against superannuation recontribution arrangements before the Commissioner’s press release upon the basis that such arrangements were too aggressive. One point which the research literature does not explore is whether such arbitrary administration of the taxation law causes tax advisors to lose confidence in the integrity of the taxation system and/or whether they take courage to explore other opportunities for minimizing tax on behalf of their clients.

## **5. PARTNERSHIP OR STRATEGIC ALLIANCE? LEGAL INDETERMINACY AND WHAT IT MEANS TO BE “COOPERATIVE” UNDER THE COOPERATIVE COMPLIANCE MODEL**

The preceding discussion has outlined why the thesis that the law is determinate is fundamental to the cooperative compliance model. Further, the preceding discussion has indicated that there are good reasons for accepting that the law will often be indeterminate. There is clearly a need to consider the implications of legal indeterminacy for the cooperative compliance model.

### **5.1 Partnership, determinacy and legitimacy**

The cooperative compliance literature repeatedly refers to the need to build a partnership with ‘the community’ and also with specific segments of the community such as small business, large business and also specific industry groups such as the building industry.<sup>122</sup> Despite the significance of the concept of ‘partnership’ to the responsive regulation approach to tax compliance, the Australian Taxation Office has not published a comprehensive statement regarding the nature and operation of the partnership concept,<sup>123</sup> and nor is there a considered discussion of the partnership concept in the theoretical literature. Various aspects of the cooperative compliance model are considered in various ATO publications, however there is no comprehensive public document which details the nature of the model, strengths of the model, weaknesses of the model and institutional structures and strategies to counteract those weaknesses. Thus, for example, the Commissioner’s compliance strategy details the operation of the compliance model,<sup>124</sup> the Large Business compliance document offers a brief and limited consideration of the problematic concept of compliance in the context of indeterminate law<sup>125</sup> and the Annual Report offers some discussion of integrity assurance and transparency measures designed to

---

<sup>122</sup> Commonwealth of Australia, *Improving Tax Compliance in the Cash Economy*, Australian Taxation Office, Canberra, 1998, 11; Commonwealth of Australia, *Cooperative Compliance- Working with Large Business in the New Tax System*, Australian Taxation Office, Canberra, 2000.

<sup>123</sup> The closest that the Australian Taxation Office has come to producing such a document is *Cooperative Compliance – Working with Large Business in the New Tax System* (above n 122). However, this document is restricted to providing operational guidance of the cooperative compliance model in a specific context, and so it does not offer a detailed elaboration of the core concepts upon which it is based.

<sup>124</sup> Commonwealth of Australia, above n 18, 3-4.

<sup>125</sup> Commonwealth of Australia, *Large Business and Tax Compliance*, above n 77.

assure community confidence in the operation of the cooperative compliance model.<sup>126</sup> There is no comprehensive, critical consideration of the cooperative compliance model. Such a document, if produced, would form the backbone of the Commissioner’s administrative strategy. A central aspect of such a document would elaborate upon the nature of the ‘partnership’ with the community to which the Commissioner refers.

A partnership connotes collective endeavour to achieve a mutual goal. The assumption of determinate law is integral to the limited mutual goal of the tax compliance partnership – *compliance* with ‘the law’. This integration of the determinacy thesis into the definition of the partnership means that the partnership need not reach a consensus upon the meaning of the law because this is a given. The sole purpose of the partnership is to develop ‘solutions’ for best implementing what is presumed to be determinate law.<sup>127</sup> Given this limited mutual goal, the responsive regulation literature implies that there is limited scope for the incommensurable standpoints described in section 4.2 above to threaten the mutuality of the partnership. Indeed, as noted in section 2.2 above, one function of responsive regulation is to generate discretionary authority in the state by shifting the population’s gaze, when considering whether to comply with a law, from questions regarding the morality of law to questions regarding the procedural fairness with which the law is administered. However, if legislative meaning is indeterminate, this exclusion of standpoint incommensurability from the regulatory domain must be reconsidered.

The issues to be addressed in undertaking this reconsideration of the compliance partnership include:

1. the identity of the partners;
2. the nature of the ‘partnership’, and in particular the implications for the existence of such a partnership if one accepts that the law is indeterminate. One key question here is whether the relationship is a partnership or a series of strategic alliances;
3. identification of the ‘partners’ and their respective roles, and in particular the significance of external stakeholders (ie government) to the partnership, the role of tax agents as partners in the context of a self assessment regime and their influence upon the nature of any partnership; and
4. whether there is one partnership with ‘the community’ or whether there are multiple partnerships with different segments of the community, and if the latter, how the confidence of the wider community in tax system integrity is maintained.

Given that it is now some ten years since the commencement of implementing responsive regulation in the taxation domain, it is timely that such issues be addressed.

## **5.2 Partnership with whom – Australian Taxation Office or government as a whole?**

As noted in section 2.2 above, Tyler’s study of public perceptions of a small number of criminal laws suggested a link between legitimacy, procedural fairness and

<sup>126</sup> Commissioner of Taxation, *Annual Report 2005-06*, Australian Taxation Office, Canberra, 2006, 201ff.

<sup>127</sup> Commonwealth of Australia, above n 18, Commissioner’s Foreword (‘in accordance with law’).

voluntary compliance. This link is fundamental to the cooperative compliance model. However, it is possible that Tyler’s findings are inapplicable in the context of taxation law because of differing public perceptions of criminal law and taxation law respectively. Although Tyler noted the limitations of his study, and in particular the absence of literature demonstrating the applicability of his findings in other legal contexts,<sup>128</sup> little has been done to address this shortcoming with specific reference to taxation law.

An integral aspect of Tyler’s study was the accuracy with which it was assumed that survey participants would self-report their compliance with the laws in question.<sup>129</sup> Tyler perhaps too readily accepts that the public are in a position to judge whether they have complied with such rules. Nevertheless, it might be that these rules of criminal law have assumed a relatively determinate meaning in Tyler’s subject population. However, there is reason to doubt the relevance of Tyler’s work to taxation law, given that 52% of the respondents in one recent survey agreed that they felt ‘very confused about taxation matters’.<sup>130</sup> Further, the relevance of Tyler’s study to ‘voluntary compliance’ of indeterminate taxation law must be open to question because taxpayers confronted with indeterminate law may well not experience the same sense of obligation to comply with ‘the law’. Where taxpayers acknowledge that the law is indeterminate, they may well not confer upon the Australian Taxation Office the ‘discretionary authority’ to resolve such ambiguity as it sees fit.

There is clearly a need for further research in this domain in order to ascertain whether Tyler’s findings are applicable with respect to indeterminate taxation law. For example, it is possible that Tyler’s subjects viewed the criminal laws examined in his study more favourably than the Australian public perceives some or all of its taxation law. The criminal laws considered by Tyler had relatively obvious justifications in terms of members of a community co-existing in relative harmony – preventing those in control of vehicles on public thoroughfares from speeding, preventing drink driving, not disturbing neighbours with excessive noise, ensuring that people park their vehicles legally and preventing theft. It would be reasonable to expect wide public support for such rules. Of course such rules reflect political compromises regarding individual rights, the power of the liquor industry to prevent an outright ban on driving with any alcohol in one’s blood, etc. However, these laws are quite possibly perceived to be less politicized than, for example, taxation law. A meaningful comparison of perceptions of such laws has not been undertaken, and in any case it is doubtful that such a study would reveal propositions of general application. Nevertheless, one study indicates that the Australian public express considerable cynicism regarding Australia’s taxation institutions more generally,<sup>131</sup> reflecting the fact that they accept that taxation law is highly politicized. In this context, it would be reasonable to speculate that there is a much lower store of legitimacy upon which the government might call in promoting voluntary tax compliance.

---

<sup>128</sup> Tyler, above n 22, 168.

<sup>129</sup> Id, 40.

<sup>130</sup> Commonwealth of Australia, *Community Perceptions Survey 2005*, Australian Taxation Office, Canberra, 2005.

<sup>131</sup> Valerie Braithwaite, *Perceptions of Who’s Not Paying Their Fair Share*, Working Paper No 54, Centre for Tax System Integrity, Canberra, 2004.

Given that many Australians seem to view taxation law differently to the way in which Tyler’s subjects viewed criminal law, with whom should the partnership be constructed under the cooperative compliance model? If the public is cynical about the origin and fairness of taxation law, seeking to construct a partnership between the tax administration and the wider community might have minimal impact upon the legitimacy of taxation law because the public do not accept that procedural fairness is an appropriate proxy for substantive fairness in the taxation context. If so, the government will need to widen its agenda by seeking to construct a partnership between the wider community and the government’s taxation institutions as a whole. This would necessitate the adoption of tax system legitimization strategies, rather than merely the extant tax administration legitimization strategies.

### 5.3 Partnership or adversarialism

The indeterminacy of taxation law suggests that Tyler’s proposition, that voluntary compliance is enhanced by legitimacy and that legitimacy is enhanced by citizen perceptions of procedural fairness,<sup>132</sup> must be reconsidered. Tyler’s study focused upon relatively ‘objective’ criminal acts, or at least, offences of a type which the general public would profess some understanding.<sup>133</sup> As it is founded upon the assumption of determinate law, Tyler’s study therefore does not necessarily offer guidance as to how taxpayer’s would behave in the context of indeterminate law. In particular, Tyler assumed that ‘voluntary compliance’ entailed action in accordance with relatively objective, determinate laws such as not exceeding a specified speed limit. There was no question of the relevant regulator seeking to redefine ‘voluntary compliance’ in terms of ‘compliance with the regulator’s interpretation of the law’. It is possible that taxpayers who encounter indeterminate law will be less influenced by perceptions of legitimacy and more influenced by self interest. If they do adopt a standpoint of self-interest, it is quite likely that they will adopt an understanding of ‘voluntary compliance’ which is at odds with that adopted by the regulator. The extract accompanying note 96 above indicates that this is the case. Further, as discussed below,<sup>134</sup> it seems that tax advisors adopt a more ‘aggressive’ advisory persona when advising upon uncertain law.

One ramification for the tax administration arising from the indeterminacy of law is that the meaning assigned to a taxation rule will depend upon a range of contextual factors, including the interpretive stance adopted by the particular tax official on a particular day and the tax official’s characterization of the circumstances of a particular case.<sup>135</sup> One such contextual factor is the Commissioner of Taxation’s statutory obligation to apply his available resources in order to achieve ‘proper use’ of available resources.<sup>136</sup> In the context of indeterminate law, it is reasonable to expect that the Commissioner will at least occasionally interpret his managerial obligation in such a way that he will ‘play for the grey’ in seeking to maximise the revenue, rather

---

<sup>132</sup> Tyler, above n 22, 172.

<sup>133</sup> The offences about which the survey subjects were questioned were exceeding the speed limit, parking offences, making sufficient noise as to disturb neighbours, drink driving and theft.

<sup>134</sup> See section 5.5.2 below.

<sup>135</sup> Owing to the fact that the concept of a fractured self, as opposed to a unified, coherent self, is the basis of modern psychology and sociology. For acknowledgement of this point in the context of responsive regulation see: Valerie Braithwaite, above n 13, 21.

<sup>136</sup> *Financial Management and Accountability Act 1997* (Cth) s 44(1). Subsection 44(2) defines ‘proper use’ as ‘efficient, effective and ethical use’, without defining those terms.

than conceding that legal indeterminacy means that interpretive discretion should be exercised in favour of the taxpayer. Thus:

- the Commissioner’s compliance strategy makes no mention of identifying areas of overcompliance, despite the fact that there is some evidence that a substantial number of tax returns might result in overpayment of tax;<sup>137</sup>
- the Commissioner might adopt unduly favourable interpretations of case decisions. For example, by focusing upon the joint judgment of two of five High Court justices in the High Court decision of *Hart*,<sup>138</sup> the Commissioner ignores the substantial uncertainty regarding the meaning of ‘scheme’.<sup>139</sup> It is difficult to believe that this partial reading of the High Court’s decision is anything but a deliberate attempt to portray the decision in the most favourable (for the revenue) light possible;
- the Commissioner appears to have adopted a selective approach to funding litigation under his test case program, apparently with the view to maximizing the likelihood of obtaining favourable outcomes;<sup>140</sup>
- the recent Burges report<sup>141</sup> illustrated that large business taxpayers believe that the Commissioner routinely adopts ambit positions which are not necessarily supported by the law. It might also be noted that the manner in which the Burges inquiry was undertaken reflects the sense of distrust between the Commissioner and members of this group of taxpayers which is undesirable in a partnership; and
- the adoption of ‘aggressive’ litigation strategies,<sup>142</sup> notwithstanding the Commissioner’s suggestion to the contrary.<sup>143</sup>

These factors indicate that, at least in some contexts, the Commissioner has responded to legal indeterminacy by adopting an adversarial, revenue maximizing stance. Of course, it is reasonable to expect that at least some taxpayers will also adapt to the indeterminate domain of tax law by adopting adversarial, self-interested positions. Further, as discussed in sections 4.3 and 5.5, the Commissioner will tolerate or accept such self-interested stances for a variety of reasons. The point is that such adversarialism is founded upon incommensurate standpoints, rather than mutual interest, and is therefore destructive of efforts to create a partnership.

<sup>137</sup> Roth, Scholz and Witte, above n 58, vol 1, 51-54. Most recently, see Republic of Ireland, *Interim Report on Under-claiming of Tax Credits, Allowances and Relief*, Joint Committee on Finance and the Public Service, Eighth Report, Dublin, 2007.

<sup>138</sup> *FCT v Hart* (2004) 217 CLR 216.

<sup>139</sup> See the discussion of the *Hart* decision in Law Administration Practice Statement PS/LA 2005/24 para 54ff; cf Justin Dabner and Mark Burton, ‘Hart – the death of tax planning?’ (2004) *CCH Tax Week* 373.

<sup>140</sup> Commonwealth of Australia, *Review of Tax Office Management of Part IVC Litigation*, Report of the Inspector-General of Taxation, Inspector General of Taxation, Sydney, 2006, Ch 6, esp para 6.186.

<sup>141</sup> Kevin Burges, *Report on the concerns of a number of the largest companies in the Large Business Segment, with ATO audit, investigation and advice procedures*, Australian Taxation Office, Canberra, 2005.

<sup>142</sup> *FCT v Indoороopilly Children Services (Qld) Pty Ltd* 2007 ATC 4236; discussed in Elizabeth Kazi, “ATO drops aggressive legal tactics” and “Ruling may go beyond the fringe” (6 March 2007) *Australian Financial Review* 1 and 6 respectively.

<sup>143</sup> The Commissioner maintains that the Australian Taxation Office upholds the model litigant policy of the Commonwealth government: Michael D’Ascenzo, Do professionals have an ethical compass and does it matter? Speech delivered to the Victorian Tax Bar Association, Melbourne, 30 March 2007.

#### 5.4 Partnership and the problem of incommensurability

The indeterminacy of law also problematises the implementation of the compliance pyramid because of the fact that the Commissioner and taxpayers might have quite different understandings of what it means to comply with the tax law in specific contexts. By contrast to the adversarialism discussed in the preceding paragraph, such conflicting interpretations might be genuinely held in the sense that both parties genuinely believe that they have arrived at the 'correct' amount of tax to pay. This was acknowledged, for example, by the Senate Economics References Committee in its consideration of the mass marketed tax minimization arrangements of the 1990's.<sup>144</sup>

If 'cooperation' with the Commissioner is central to the concept of compliance, taxpayers who are not in a financial position to challenge the Commissioner's interpretation will feel coerced into complying with what they consider to be an incorrect interpretation of the law. Here, the Commissioner's adherence to the proposition of determinate law can cause real damage to the perceived legitimacy of the tax system at an individual level because the Commissioner fails to acknowledge that incommensurable interpretive standpoints may lead to different, plausible interpretations. By enforcing what he considers to be the correct interpretation of the law, it is possible that taxpayers will submit to the Commissioner's coercive power but move to a different compliance posture in the future. Again, such an outcome would be destructive of any partnership with the taxpayer.

#### 5.5 Indeterminacy and the diffusion of social power – the genesis of strategic alliances

The third implication of legal indeterminacy for the concept of partnership is that officers within the Australian Taxation Office might be less secure about what compliance means in a particular case. Meaning will be contingent upon the interpretive stance adopted by the particular tax officer in the specific case and having regard to other contextual factors. Thus the neat dichotomous categorization of taxpayers depicted in the compliance pyramid, between compliers and non-compliers, will be problematic. Instead of black and white, there will be many shades of grey. As different tax officials interpret the law and taxpayers' circumstances differently, there is the possibility that the Australian Tax Office will speak with multiple dissonant voices as its officers grapple with the indeterminacy of the rules they are meant to enforce.<sup>145</sup>

##### 5.5.1 Strategic alliances and diffuse social power

If there is no mutual understanding upon which a partnership between the taxation office and the wider community can be grounded, social power is far more diffuse than portrayed under the top-down paradigm of responsive regulation.<sup>146</sup> Without the clear authority of the law underpinning his administration of the tax system, the Commissioner is not the omnipotent regulator depicted in command and control regulatory models, or for that matter in the responsive regulation model. Instead, the Commissioner must choose his targets carefully, hoping that he survives the rigours of public challenge and judicial scrutiny relatively unscathed. If the Commissioner is

<sup>144</sup> Commonwealth of Australia, *Inquiry into Mass Marketed Tax Effective Schemes and Investor Protection*, Interim Report of the Senate Economic Reference Committee, Canberra, 2001, 26ff.

<sup>145</sup> See, for example, the examples of inconsistent administrative response in: TNS Research, *Review of the Taxpayers' Charter 2005*, TNS Research, Perth, 2006, 53.

<sup>146</sup> Mitchell Dean, above n 8.

perceived to be compelling taxpayers to adopt a communitarian outlook, he risks fuelling counterproductive public perceptions of oppressive conduct<sup>147</sup> which could all too easily fuel widespread tax protest<sup>148</sup> and a legitimacy crisis. Doubtless, well resourced taxpayers could exert considerable pressure upon the Commissioner through such ‘public information’ and lobbying efforts.<sup>149</sup> The Australian Taxation Office will be reluctant to pursue dubious cases for fear that unfavourable decisions will undermine their projection of concentrated state power reflected in the compliance pyramid.<sup>150</sup>

In this context of diffuse social power, the best that the Commissioner can hope for is a series of strategic alliances with different segments of the community. A strategic alliance entails otherwise independent parties pursuing their respective objectives by means which happen to coincide. Rather than appealing to what is often portrayed as the communitarian spirit of the law, the existence of strategic alliances is founded upon self interest:

An important element of the building and construction project is the establishment of good relationships with industry bodies and the unions. For example, meetings have already been held with the HIA and MBA. They are supportive of the ATO approach to achieve a level playing field so that cash operators are not able to gain a competitive advantage over compliant businesses.<sup>151</sup>

Here the building industry lobbyists were prepared to engage with the ATO in order to advance the interests of their members by neutralizing the competitive advantage of non-compliant builders. However, extrapolating from this standpoint of self-interest, it would be reasonable to expect that this relationship would cease if the ATO proposed a program which was disadvantageous to HIA and MBA members but advantageous to the broader community.

To similar effect, Braithwaite proposes that special deals be negotiated with specific groups of self-interested taxpayers:

A dilemma of business-industry partnership is that business norms are not pro-tax, but anti-tax ... A risk of partnership, therefore, is that the tax office will be captured by an anti-taxpaying culture. One idea for a paradigm of community partnership to respond to this change (sic) of capture would, we suspect, be premature until some of the other strategies in this chapter were given more time to work. This is the idea of the government negotiating with the business community a *compliance-tax-rate-spiral*. The reason that it may be a bad idea at this time is that there are too many corporations presently

<sup>147</sup> Commonwealth of Australia, *Inquiry into Mass Marketed Tax Effective Schemes and Investor Protection*, Final Report of the Senate Economics References Committee, Parliament of Australia, Canberra, 2002, 22ff.

<sup>148</sup> Marjorie Kornhauser, ‘Legitimacy and the Right of Revolution: The Role of Tax Protests and Anti-Tax Rhetoric in America’ (2002) 50 *Buffalo L Rev* 819.

<sup>149</sup> Michael Carmody, ‘Administering Australia’s Tax System’ Monash University, Law School Foundation Lecture, 30 July 1998; see also George Megalogenis, ‘Cheats lobbying politicians to pressure the ATO’ *The Australian*, 31 July 1998, 5.

<sup>150</sup> Braithwaite acknowledges this shortcoming of the general anti-avoidance rules: J Braithwaite, above n 34, 63.

<sup>151</sup> Australian Taxation Office, *Improving Tax Compliance in the Cash Economy*, Australian Taxation Office, Canberra, 1998, 12.



paying no tax who therefore have no interest in trading off higher compliance for lower company tax rates. However, floating the possibility of a *compliance-tax-rate-spiral* as something that might work in future could encourage public-regarding business taxpayers to see that in the long run there is much that Australian business could gain from a more cooperative compliance culture.<sup>152</sup>

Presumably public regarding businesses are already voluntarily complying with the law, so it is not clear how this compliance tax rate spiral would induce non-taxpaying taxpayers to pay tax. It is possible that lower tax rates will induce non-taxpayers to pay some tax because the perceived costs of minimizing tax are greater than complying. But this shift in behaviour would be based upon calculations of self interest, a prospect which Braithwaite acknowledges. The danger for Braithwaite’s model is that once it has embarked upon this cycle of self interest, the government may never be in a position to break out into a cycle of ‘public regarding’ compliance. In any case, there are a number of other problems with this proposal, given that the integrity of the taxation administration is crucial to winning the wider community over to the model of cooperative compliance.<sup>153</sup> For example, if such special arrangements are entered into on a one-to-one basis, the Commissioner’s secrecy obligations mean that such arrangements cannot be transparent. Further, whether or not such arrangements were transparent, it might reasonably be expected that such favourable deals will be viewed cynically by others in the community, who might see such arrangements as yet another instance of regulatory agencies being too close to big business.<sup>154</sup> After all, the message that such an arrangement would send is that tax avoiders can broker a special deal simply by being especially successful at tax avoidance. Accordingly, other taxpayers might understandably be more inclined to hold back from embracing the communitarian ethic in order to minimize their tax and/or broker their own special deal:

Go too far in reducing penalties and interest and it may be difficult to justify the result to the community generally and to those who face penalties and interest for debts unrelated to any participation in tax avoidance schemes in particular.<sup>155</sup>

With this descending spiral of special deals brokered by self-interested taxpayers, the communitarian ethic would quite possibly recede ever more into the distance, leaving cynicism to prevail.

### 5.5.2 Strategic alliances and the role of tax advisors

The preceding discussion suggests that the indeterminacy of taxation law problematises the creation of a partnership between the Taxation Office and the community, because it may not be possible to identify a mutual ‘enterprise’. In the

<sup>152</sup> John Braithwaite, ‘Large Business and the Compliance Model’, in Valerie Braithwaite (ed), above n 13, 177 at 188-9. It is not clear how inducing ‘public regarding’ corporations (which, presumably, are less deeply imbued with an ‘anti-taxpaying culture’ in the first place) will lead non-public regarding corporations to embrace a cooperative compliance culture. Moreover, it is not clear how negotiating a *compliance-tax-rate-spiral* will counteract regulatory capture on the part of tax administrators who are seeking a partnership with members of the community who adopt an ‘anti-taxpaying’ stance.

<sup>153</sup> Braithwaite and Braithwaite, above n 17, 218.

<sup>154</sup> Braithwaite, above n 11, Item 4.1.7.

<sup>155</sup> Michael D’Ascenzo, ‘In Defence of the Rule of Law’, Speech delivered to Law Council of Australian Taxation Law Workshop, Aitken Hill, Victoria, 26-28 October 2001.

absence of determinate law which grounds a mutual understanding of compliance, interpretive differences between the Taxation Office and taxpayers can only be resolved by an exercise of power. It is possible that such an exercise of interpretive discretion is perceived as benign. Equally, the Commissioner can be perceived to be as unreasonable in ‘chasing down every last cent’ which might possibly be justified under the legislation as taxpayers can be unreasonable in avoiding paying every last cent of tax on the basis of a diametrically opposed interpretation.

As intermediaries between taxpayers and tax administrator, ‘tax advisors’<sup>156</sup> can be expected to play a pivotal role in shaping the nature of the relationship between the two parties.<sup>157</sup> This might be negative for the Tax Office, given that tax advisors as a group are more critical of the Australian Taxation Office with respect to specific performance indicators than other segments of the community.<sup>158</sup> Much of the literature dealing with the influence of advisors upon taxpayer compliance adopts a definition of compliance which assumes that the taxation law is determinate<sup>159</sup> – very little of this literature has considered the role of tax advisors where the law is ambiguous.<sup>160</sup> Nevertheless, the literature indicates that tax advisors assume different persona in different contexts. In performing routine ‘tax compliance’ work, such as lodging administrative forms and applying settled law to straightforward cases (ie deductibility of usual and appropriate business expenses), it seems that tax advisors adopt a ‘compliance’ outlook and therefore assume a ‘tax administration’ persona. However, where the law is ambiguous, it seems advisors adopt an ‘aggressive’ stance in assisting their clients to minimize their tax.<sup>161</sup> Thus, although the data indicates that

<sup>156</sup> It should be noted that ‘tax advisors’ is used broadly here, and so is not restricted to registered tax agents and lawyers giving tax advice. Financial planners also play a prominent role in giving advice which affects the tax paid by taxpayers.

<sup>157</sup> Commonwealth of Australia, *The Australian Taxation Office’s Management of its Relationship with Tax Practitioners*, Performance Audit Report No 19 2002-03, Australian National Audit Office, 2003, 38-40; Maryann Richardson and AJ Sawyer, above n 101, 210.

<sup>158</sup> TNS Research, above n 145; Interestingly, Tyler observes that the more highly educated a person is the lower their perception of state legitimacy: Tyler, above n 22, 47. Tyler states that this is consistent with the earlier work of Sarat: A Sarat, ‘Support for the legal system’ (1975) 3 *American Politics Quarterly* 3.

<sup>159</sup> Thus, for example, tax compliance has been defined as ‘reporting all income and paying all taxes in accordance with the applicable laws, regulations and court decisions’: J Alm, B Jackson and M McKee, ‘Alternative Government Approaches for Increasing Tax Compliance’ (1992) 90 *TNT* 260; see also the definition of compliance adopted by Richardson and Sawyer: above n 101.

<sup>160</sup> Note that Richardson and Sawyer observe that their definition of ‘compliance’ would mean that aggressive tax planning is ‘compliant’ behaviour; id, 210. Note, however, that where general anti-avoidance provisions apply to such ‘aggressive tax planning’, clearly the behaviour would be non-compliant.

<sup>161</sup> In this regard an influential study was that of Steven Klepper, Mark Mazur and Daniel Nagin, ‘Expert intermediaries and legal compliance: the case of tax preparers’ (1991) 34 *Journal of Law and Economics* 205 (arguing that tax preparers assumed the dual role of tax code enforcer when the law was ‘unambiguous’ and tax loophole exploiter where the law was ambiguous). For other studies indicating a correlation between tax preparer use and ‘non-compliance’ see: PA Hite, ‘The effect of peer reporting behaviour on taxpayer compliance’ (1988) 9 *Journal of the American Taxation Association* 47; B Erard, ‘Taxation with representation: an analysis of the role of tax practitioners in tax compliance’ (1993) 52 *Journal of Public Economics* 163; JC Young, ‘Factors associated with noncompliance: evidence from the Michigan tax amnesty program’ (1994) 16 *Journal of the American Taxation Association* 82.

clients prefer low risk tax returns, it may be that in the context of ambiguous law advisors and clients have differing understandings of the meaning of ‘low risk.’<sup>162</sup>

Therefore a number of questions are worthy of further investigation:

1. in selecting a tax advisor and seeking advice, do taxpayers clearly express their tax risk preference, such that the significance of tax advisors’ influence is diminished? This is important because the personal opinions of tax advisors regarding the tax system might be outweighed by market forces – tax advisors would have to meet the tax advice market rather than tax advisors shaping that market;
2. whether the Commissioner’s cooperative compliance program has induced a communitarian ethic on the part of tax advisors, such that ambiguous law is interpreted less ‘aggressively’. Alternatively, have tax advisors adopted/maintained a self-interest ethic, under which they selectively negotiate strategic alliances with the ATO when in their clients’ respective interests, while adopting ‘aggressive’ stances when this is perceived to be in their clients’ respective interests; and
3. if such an ethical shift has arisen, what were the drivers and inhibitors of this shift and if such an ethical shift has not arisen, what might prompt such a shift? In particular, what is the significance of Taxation Office actions such as the publication of more information regarding the exercise of the Commissioner’s general administrative discretion, playing a pro-active role in shaping the way that tax advisors interact with the ATO and so forth?

### 5.5.3 Demand driven cooperative compliance?

Whether taxpayers’ risk preferences dictate the outcome of tax advice was recently considered in Australia by Braithwaite and Sakurai.<sup>163</sup> After analyzing survey data Sakurai and Braithwaite contend that a majority of taxpayers are relatively conservative in their attitude towards selecting a tax advisor. The majority of taxpayers, the authors suggest, state that their ideal tax advisor is one in whom they can trust to adopt a ‘minimum fuss’ approach to tax compliance. This would suggest that clients’ preferences within the financial services market would act as a significant brake upon the deployment of creative compliance strategies. However, three observations should be noted with respect to this finding.

First, the nature of the survey relied upon by Braithwaite did not enable the respondents to elaborate upon what they understood to be a ‘minimum fuss’ approach to tax compliance.<sup>164</sup> Presumably, ‘minimum fuss’ is synonymous with ‘compliance’.

<sup>162</sup> Peggy A Hite and Gary A McGill, ‘An Examination of Taxpayer Preference for Aggressive Tax Advice’ (1992) 45 *National Tax Journal* 389.

<sup>163</sup> Yuka Sakurai and Valerie Braithwaite, ‘Taxpayers’ perceptions of practitioners: Finding one who is effective and does the right thing?’ accessed at <http://ctsi.anu.edu.au/publications/taxpubs/Sakurai.VB.pdf>; cf A Christensen, ‘Evaluation of Tax Services: A Client and Preparer Perspective’ (1992) *The Journal of the American Taxation Association* 160.

<sup>164</sup> Question 11.11 merely asked ‘What priority would you place on the following qualities if you were to choose a tax agent or advisor?’ Respondents were offered a range of alternative descriptions, one being ‘someone who will do it honestly and with minimum fuss’. It might be noted that ‘minimum fuss’ is ambiguous – does it mean ‘avoiding confrontation with the ATO’ or does it mean ‘not fussing with the client about dotting every I and crossing every t’?

However, given the preceding discussion regarding the indeterminacy of the compliance concept, it is clear that there are shades of grey which the survey data does not tease out. After all, it should be remembered that many of those who participated in ‘aggressive tax minimization arrangements’ claimed to have taken appropriate steps in ensuring that their arrangements were ‘within the law’ and were not ‘aggressive’.<sup>165</sup> The Senate Economics Committee final report even acknowledged that the ATO appeared to lend some credence to this view by its ambivalent response to such schemes.<sup>166</sup> Further, the prominent role of financial advisors<sup>167</sup> in promoting so-called ‘aggressive tax minimization arrangements’<sup>168</sup> indicates that they wield considerable influence with clients who generally have low financial literacy<sup>169</sup> and who, as a group, purportedly prided themselves upon their good tax compliance record.<sup>170</sup> The recurrent theme of testimony given by taxpayers embroiled in these schemes was that their professional advisor considered that the relevant scheme was ‘within the law’.<sup>171</sup>

The nature of this problem may be illustrated by reference to the Tax Commissioner’s statement regarding superannuation retribution arrangements.<sup>172</sup> Clearly an arrangement which appears to fall within the somewhat vague description of such arrangements provided by the Commissioner is a ‘minimum fuss’ arrangement, but what of a similar arrangement which is not within this administratively defined safe harbour? A tax advisor, for example, might provide a client with some illustrations of the types of express loopholes under the taxation law by way of illustrating the arbitrary nature of the existing taxation law. The tax advisor might then recommend a particular arrangement to a client, perhaps a variation of an ‘authorised’ superannuation retribution arrangement, which the advisor considers to be legitimate. The advisor might suggest that the taxpayer enter into such an arrangement, noting that other taxpayers are ‘playing a similar game’ but benefiting from the Commissioner’s favourable treatment of some tax minimization arrangements. The point is that financial advisors do not provide advice with respect to a tax system which is founded upon the dichotomy of compliance/non-compliance. Advisors are not necessarily ‘playing for the grey’ but, rather, are swimming in a sea of grey.

Second, it is not clear how clients with a preference for ‘minimum fuss’ advice will accurately identify providers of such advice. That taxpayers seek advice in order to

<sup>165</sup> Commonwealth of Australia, *Inquiry into Mass Marketed Tax Effective Schemes and Investor Protection*, Interim Report of the Senate Economic Reference Committee, Canberra, 2001, 26ff; see also Commonwealth of Australia, *Inquiry into Mass Marketed Tax Effective Schemes and Investor Protection*, Final Report of the Senate Economics References Committee, 2002, 20ff.

<sup>166</sup> Cf Michael D’Ascenzo, ‘In Defence of the Rule of Law’, Speech delivered to Law Council of Australian Taxation Law Workshop, Aitken Hill, Victoria, 26-28 October 2001.

<sup>167</sup> According to then Second Commissioner Michael D’Ascenzo, some 97% of the 35,000 taxpayers involved in mass marketed tax minimisation arrangements were advised by a tax advisor: Michael D’Ascenzo, above n 166.

<sup>168</sup> A nomenclature which seems to imply that ‘non-aggressive’, but nevertheless deliberate, tax minimising, arrangements are somehow different.

<sup>169</sup> Chant Link and Associates, *A Report for ASIC on Consumer Decision Making at Retirement*, Report No 2514, Sydney, 2004, 52ff.

<sup>170</sup> Commonwealth of Australia, of Australia, *Inquiry into Mass Marketed Tax Minimisation Schemes and Investor Protection*, Interim Report of the Senate Economics Committee, AGPS, Canberra, 2001, ch 3.

<sup>171</sup> Commonwealth of Australia, *Inquiry into Mass Marketed Tax Minimisation Schemes and Investor Protection*, Interim Report of the Senate Economics Committee, AGPS, Canberra, 2001, ch 4.

<sup>172</sup> Commissioner of Taxation, op cit n 118.

obtain assurance that they are within the law has been supported by a number of studies in several jurisdictions.<sup>173</sup> However, the literature in this field indicates that clients and tax advisors often talk at cross purposes when discussing relative levels of audit risk with respect to particular items on a tax return.<sup>174</sup>

Third, the Braithwaite/Sakurai study does not indicate whether taxpayers would adopt a 'minimum fuss' approach where to do so created a higher perceived tax burden than would apply if some tax minimizing advice were followed. As Braithwaite notes, survey responses are context dependent.<sup>175</sup> With this in mind, it would be useful to know whether those who opted for a 'minimum fuss' approach would have responded similarly if told that this approach would effectively cost them \$10,000 by comparison to a 'legitimate' restructuring of their affairs akin to the formalism of a superannuation retribution arrangement. Braithwaite's conclusions as to taxpayer attitudes to compliance must be read cautiously, owing to the significant prospect that taxpayer attitudes towards compliance may vary with the context in which those attitudes are formed.

#### 5.5.4 Cooperative compliance and tax advisors – the need for further research

Assuming that tax agents do play a significant role in shaping their client's risk profiles, responsive regulation posits that tax agents will adopt the cooperative, communitarian ethic of the responsive regulator and induce their clients to gravitate to the base of the compliance pyramid. Unfortunately, there is insufficient data to assess whether this effect is identifiable. In a recent survey undertaken by TNS Consulting, it seemed that tax agents as a group are more negative regarding Australian Taxation Office performance against its Charter, but it also seems that tax agent opinion of the ATO has improved over recent years.<sup>176</sup>

This research does not answer the question of whether the cooperative compliance model is engendering a new approach to 'voluntary compliance' on the part of tax advisors. Further research needs to be undertaken in order to ascertain whether the apparent improvement in tax advisor perceptions of the ATO has translated into less 'aggressive' stances being recommended to clients in areas of ambiguity/creative compliance.

#### 5.6 Partnership or regulatory capture?

If the relationship between the tax administration and at least some taxpayers in some circumstances is best conceived in terms of a strategic alliance, and a strategic alliance in an indeterminate legal domain, one critical question is whether there are sufficient safeguards in place to ensure that the Commissioner is not captured by powerful interest groups. Indeed, one reason given for the adoption of responsive regulation was that a command and control approach to regulation predisposed regulators to being 'captured' by regulatees because regulators were reluctant to use the big sticks available to them in a one dimensional regulatory response.

---

<sup>173</sup> LM Tan, 'Taxpayers' Preference for Type of Advice from Tax Practitioner: A Preliminary Examination' (1999) 20 *Journal of Economic Psychology* 431 (New Zealand); PA Hite and G McGill, 'An Examination of Taxpayers' Preference for Aggressive Tax Advice' (1992) 45 *National Tax Journal* 389 (USA); Pauline Niemirowski and Alexander Wearing, 'Taxation Agents and Taxpayer Compliance' (2003) 6 *Journal of Australian Taxation* 166 at 196 (Australia).

<sup>174</sup> Hite and McGill, above n 173, 390-1.

<sup>175</sup> Braithwaite, above n 13, 16-17.

<sup>176</sup> TNS Research, *Review of the Taxpayers' Charter 2005*, TNS Research, Perth, 2006, 16-17.

The concept of regulatory capture is open to various definitions, ranging from corrupt conduct to subtle indications regarding the regulator’s future career path to even more subtle influencing of the regulator’s outlook which affects the application of law in the grey zone.<sup>177</sup> Thus, for example, when considering the possible application of Part IVA, a regulator might be influenced by the neoliberal discourses of regulatory compliance costs, efficiency/risk assessment and international business competitiveness, discourses which they encounter on a daily basis in their dealings with large business taxpayers. Such discourses often lead to a different conclusion than that arrived at from some other deontological standpoint such as ‘it is right to pay tax’.

Clearly, in talking of building partnerships with ‘stakeholders’ such as large business taxpayers, there is a real risk of some form of regulatory capture occurring. Unfortunately, to date the literature regarding responsive regulation in the taxation domain does not grapple with this issue adequately.

In the recent past there are sufficient indications of a failure of overt institutional integrity assurance as to raise concerns about the prospect of regulatory capture or, at best, regulatory failure. For example:

- as discussed by Grbich<sup>178</sup> and Braithwaite,<sup>179</sup> the ‘Petrolias affair’ is cause for concern regarding the extent to which the tax administration has allowed a neoliberal ‘risk management culture’ to diminish the legitimacy of the tax administration because of the use of ‘strategic alliances’ to advance the interests of some taxpayers at the expense of others;
- the membership and terms of reference of the Commissioner’s ad hoc advisory committees are less than inclusive of the wider community, and moreover the nature of the Australian Taxation Office response to matters raised by such committees is not clear;<sup>180</sup>
- the recent management of small business tax debt<sup>181</sup> raises the same query regarding the integrity of the tax administration; and
- the Commissioner’s integrity assurance mechanisms are themselves not transparent.<sup>182</sup>

It may be that the statutory secrecy obligations of the Commissioner with respect to taxation information have had their day. Conceived in an era where command and control regulators were assumed to impartially enforce the ‘democratic will’, secrecy of tax information was justified upon the basis that executive government could be trusted to do its job. In the new era of discretionary administration of indeterminate law, there is at least a case for enhancing the transparency of tax administration by

<sup>177</sup> See the material cited at n 49 above.

<sup>178</sup> Yuri Grbich, ‘After Bellinz and Ralph: a new focus for decision-making in the Australian tax system’ in Michael Walpole and Chris Evans, *Tax Administration in the 21st Century*, Prospect, Sydney, 2001, 11.

<sup>179</sup> Braithwaite, above n 34, 41, 61, 73.

<sup>180</sup> Burton, above n 61; Braithwaite, above n 34, 73.

<sup>181</sup> Inspector-General of Taxation, *Review into the Tax Office’s Small Business Debt Collection Practices*, Commonwealth of Australia, Canberra, 2005. Fleur Anderson, ‘Direct calls to small business pay off for Tax Office’ *Australian Financial Review*, 23 August 2006, 11.

<sup>182</sup> For discussion of this see: Burton, above n 61.

lifting the veil of secrecy. Indeed, Braithwaite speculates that such action may be appropriate in the case of large corporate taxpayers,<sup>183</sup> although he does not explain why restricting tax system transparency to this demographic group would be appropriate. The most obvious benefit of such an approach would be that the Commissioner would not need to devote as many resources to integrity assurance measures designed to promote community confidence in the tax administration. Further research needs to be undertaken with a view to identifying the relative merits of a relaxation of the Commissioner's secrecy obligations.

## 6. CONCLUSION

There can be little doubt that the cooperative compliance model represents a quantum shift in the taxpayer/tax administration relationship, and it is doubtful that many would argue for a return to the adversarial approach of the past. Nevertheless, the cooperative compliance model is still under development. The purpose of this paper was to identify the weaknesses of the cooperative compliance model, not with the object of rejecting the model but rather with a view to identifying those areas which require further theoretical/empirical research.

The rhetorical strength of the responsive regulation paradigm rests upon the rule of law because the proposition of determinate law is central to the success of the responsive regulation paradigm. Knowing who is complying and who is not complying, who are the 'cheats' and who are 'socially irresponsible', makes it easy to legitimize responsive regulation. Under this regulatory model, encouraging taxpayers to comply with 'the law' and deploying enforcement powers against those who resist seems a sensible approach to managing a mass tax system with limited resources. Within this paradigm it is accepted that the Commissioner cannot be expected to achieve perfect neutrality in the sense of 'chasing down every last cent'. However, the legitimacy of administrative action rests upon the belief that the Commissioner is amoral in his administration of 'the law' – that the Commissioner is merely implementing 'the democratic will' and so is not adversarial but fair, he is not partisan but impartial. The exercise of state power is neutral and efficient. Offering such a reassuring depiction of tax administration, it is little wonder that the troubling ambiguity of taxation law receives fleeting attention within the responsive regulation literature.

Paradoxically, however, adherence to the determinacy thesis is the Achilles heel of responsive regulation. At least some significant aspects of the taxation law are indeterminate. As the Commissioner acknowledged in 1992, such ambiguity goes to the heart of the concept of compliance for those with the resources to explore such ambiguity.<sup>184</sup> Why, then, does the Commissioner persevere with the discourse of partnership? In part, adherence to the belief in determinate law is testimony to the rhetorical power of the rule of law. It may be that, living in what purports to be a liberal democracy, contemplating a world in which the law is not determinate is simply too horrific for many to accept that our noble liberal dream is in fact a nightmare of unfettered executive and/or judicial discretion. In any case, there are good strategic reasons for the Commissioner to adhere to this position, even if he at times implicitly seems to recognize that the tax law is not determinate. Most

---

<sup>183</sup> Braithwaite, above n 34, 160-1.

<sup>184</sup> Boucher, above n 2.

importantly, adherence to the legal determinacy thesis enables the Commissioner to adopt a 'don't shoot the messenger' discourse – 'I am only applying the law' – when confronted with allegations of partial tax administration or when subjected to political pressure.<sup>185</sup> More cynically, endorsing the proposition that 'the law is the law' means that the Commissioner is able to promote his interpretation of law, which he most probably knows to be contingent, as the 'right' interpretation. By doing so, he maintains the faith in impartial administration while in fact adopting contingent interpretations of ambiguous law. Further, by adopting this message, the Commissioner hopes to reassure the general public that all really are equal before the tax law, despite the evidence of regulatory capture which suggests the contrary.

Significant parts of the tax law are indeterminate and the implications of this indeterminacy for the cooperative compliance model must be the subject of further quantitative and qualitative research. In the absence of such research, it is possible that responsive regulation is not fulfilling its promise. It is possible, for example, that tax administration does not entail a partnership. Instead, Commissioner and taxpayer alike might pursue their respective interests as they best see them in specific contexts. In specific contexts, the interests of taxpayer(s) and tax Commissioner might overlap and so a strategic alliance will be formed. In other contexts, the interests of taxpayer(s) and Commissioner might diverge and any former strategic alliance will dissolve. It is possible, therefore, that effective tax administration is undermined by the failure to acknowledge the significance of law's indeterminacy for the cooperative compliance model. The limited evidence available suggests that these possibilities cannot be discounted. It is time to reconsider this model by undertaking further research.

---

<sup>185</sup> Michael Carmody, 'Administering Australia's Tax System' Monash University, Law School Foundation Lecture, 30 July 1998; see also George Megalogenis, 'Cheats lobbying politicians to pressure the ATO' *The Australian*, 31 July 1998, 5.



# Unravelling the Mysteries of the Oracle: Using the Delphi Methodology to Inform the Personal Tax Reform Debate in Australia

**Chris Evans\***

## ***Abstract***

The paper explores key outcomes relating to personal income tax (PIT) reform in Australia derived from the use of a Delphi methodology conducted during 2006. The Delphi methodology combines quantitative and qualitative techniques to explore future possibilities in systematic and iterative rounds of anonymous testing involving a panel of international experts in the field of personal taxation. The experts have been drawn from Australia and from countries with comparable PIT regimes, such as the UK, the USA, Canada and New Zealand. Over a four month period the panel members responded to a series of open-ended propositions relating to the design and operation of the PIT, with a view to establishing whether a consensus on key PIT reform issues could be developed.

Studies comparing the Delphi's results with other methods have confirmed the effectiveness of the methodology on the basis of both its capacity to generate ideas and its effective use of participants' time. This paper considers the methodology used and also focuses on the outcomes of the process, showing how these outcomes are being used to inform the final phase of a broader research project into personal tax reform in Australia which is being conducted with funding from the Australian Research Council and support from CPA Australia.

## **INTRODUCTION**

The personal income tax (PIT) is a vital component of modern tax systems. This is particularly the case in Australia, where in recent years it has accounted for over 40% of total tax revenue (Australian Bureau of Statistics, 2004) and over 12% of GDP (OECD, 2005a). In Australia the PIT has both high visibility and high impact (Evans and Drum, 2006). Roughly 85% of all tax returns are lodged by individuals (usually through a tax agent), and in 2002-03 10.7 million individuals (out of a total population of roughly 19 million) were required to lodge returns (Australian Taxation Office, 2005).

In Australia the PIT currently faces major problems. Solutions need to be found to a variety of defects relating to the tax base, tax rates and tax administration. The tax base has been undermined on a number of fronts, primarily as a result of ad hoc decisions to grant tax exemptions, deductions and rebates (often to specific groups), different entities being taxed differently (individuals, trusts, companies), and a resilient tax avoidance/evasion culture. The tax base areas of the PIT which need repair cover a wide range of issues, including tax expenditures, Capital Gains Tax

---

\* Professor at Atax, Faculty of Law, University of New South Wales, Sydney, Australia. Email: [cc.evans@unsw.edu.au](mailto:cc.evans@unsw.edu.au).

(CGT), negative gearing, wealth taxes, work-related expenses and artificial tax minimisation.

In terms of tax rates and thresholds, and despite recent reforms, Australia's high marginal rates still apply from relatively low income thresholds by international standards. In addition, social security recipients face very high effective marginal tax rates on earnings.

In terms of administration, the costs of complying with the PIT in Australia are relatively high. The most recent comprehensive study (Evans et al, 1997, Table 5.3, p 65) estimated the compliance costs of individual taxpayers in 1994–95 at about \$2.9 billion, corresponding to 5.6% of individual tax revenue or 0.63% of GDP. Excluding sole traders, the compliance costs of non-business individuals in 1994–95 were estimated at \$1.5 billion, corresponding to 4% of relevant tax revenue or 0.34% of GDP. These considerable costs have led to calls for tax simplification, which include proposals for reducing annual filing for non-business individual taxpayers in Australia (see, for example, Evans 2004).

The complexity of the Australian PIT may have also driven Australian personal taxpayers into the hands of tax agents and advisers far more than has been the case in other comparable jurisdictions. An OECD survey (2005b) conducted in 2004 (and relating to the financial year immediately before the survey year) showed that 77% of all personal income tax returns in Australia were prepared with the assistance of tax professionals. The percentages for other comparable jurisdictions included: Canada: 45%; New Zealand: 30%; UK: 53%; and USA: 56%.

This paper considers one part of a broader research project which aims to develop a model of the Australian personal income tax system that is capable of commanding widespread expert and community support while still delivering the expected revenue flow and tax policy objectives<sup>1</sup>. In this way, it is proposed that the project will inform and influence the contemporary debate about reform of the Australian PIT in particular and the PIT of comparable tax jurisdictions more generally. The project combines various research techniques in an innovative way to:

- construct and test, using micro-simulation techniques, a series of hypothetical models of the personal income tax system in order to establish which models can best deliver the required policy outcomes of assured revenue collection with the optimal blend of equity, efficiency and simplicity. This part of the project has been completed, and its major findings have been reported in various papers, including Tran-Nam et al (2006) and Andrew (2005);
- subject some of the central issues and concepts underpinning these models to scrutiny and analysis by a panel of international tax experts (using a Delphi

---

<sup>1</sup> This paper is written and presented as part of an on-going Australian Research Council (ARC) Linkage research grant for 2005 and 2006: Towards systemic reform of the Australian personal income tax: developing a sustainable model for the future. The financial support of the ARC and the partner organization – CPA Australia – is gratefully acknowledged. The author would also like to acknowledge the other project team members – Associate Professor Binh Tran-Nam (Atax, UNSW), Professor Brian Andrew (Atax Visiting Fellow and Charles Darwin University), Paul Drum and Garry Addison (CPA Australia) and Linh Vu (Atax, UNSW) – for their contributions to this paper and the project. Their input is appreciated; any mistakes are my own.

methodology) in order to establish strengths and potential weaknesses in the models and seek to establish a consensus around one single model;

- survey tax community attitudes to this expert-derived model in order to establish levels of potential resistance/acceptance by key stakeholders including tax payers, tax practitioners, tax professional bodies and tax administrators; and
- fine-tune or revise the model to reflect community feedback.

This paper focuses only upon the Delphi methodology and explains how it is being used as a critical component of the overall research project. The Delphi methodology combines quantitative and qualitative techniques to explore future possibilities in systematic and iterative rounds of anonymous testing involving a panel of international experts in the field of personal taxation. The experts have been drawn from Australia and from countries with comparable PIT regimes, such as the UK, the USA, Canada and New Zealand. Over a four month period the panel has responded to a series of open-ended propositions relating to the design and operation of the PIT, with a view to establishing whether a consensus on key PIT reform issues can develop.

The emphasis in the paper is upon both the process of conducting a Delphi and the specific outcomes of the Delphi. The Delphi stage was completed in 2006 and the data has been collated, analysed and used to inform the final phase of the broader research project, which was completed by June 2007<sup>2</sup>.

The next part of the paper explains in more detail the theory underpinning the Delphi methodology, including references to the extensive literature on the topic. The paper then describes the Delphi process actually adopted in this research project and the outcomes of that process.

## THE DELPHI METHODOLOGY

The word Delphi refers to the hallowed site of the most revered oracle in ancient Greece, where forecasts and advice were sought (Fowles, 1978). The Delphi methodology as commonly understood in modern usage “operates on the principle that several heads are better than one in making subjective conjectures ...and that experts will make conjectures based upon rational judgement rather than merely guessing” (Weaver, 1971, p. 268). It is a dialectical process designed to foster the exploration and distillation of expert opinion (Helmer, 1983).

In essence it is “a systematic, iterative method of forecasting based on the collection of opinions from a group of experts. Its objective is to obtain a consensus of opinion from these individuals about future trends, events or changes in a field of practice; or alternatively, to clarify and perhaps explain the nature of revealed dissent or divergence of opinion” (Carley, 1980, quoted in Birkett at page 4). Birkett goes on to note that it “replaces open debate by a carefully designed program of anonymous testing...[utilizing] a nominal group technique; members of the group are confronted by the opinions of other members, but face to face interaction does not occur”.

---

<sup>2</sup> A survey of over 3,000 individual (non-business) taxpayers was undertaken in November 2006 and a survey of over 1,000 tax practitioners dealing with the individual (non-business) taxpayers was conducted in January 2007.

Anonymity ensures that the biasing effect of group pressures, dominant individuals and the like does not occur.

The methodology was originally developed in the 1950s by Norman Dalkey and Olaf Helmer, and combines quantitative and qualitative techniques to explore future possibilities.<sup>3</sup> It was initially utilized by the RAND<sup>4</sup> Corporation as a tool for forecasting aspects of future warfare, but has subsequently been used in a variety of ways, well beyond technological forecasting, in industry, government and academia.

One major variation, used in the current research, is the “Policy Delphi”, the main goal of which is to expose different options and opinions regarding an issue and the principal pro and con arguments for these positions (Slocum, 2005). For example, the Policy Delphi methodology has been used to examine public health issues such as drug use (Rainhorn et al, 1994), military policies (Linstone and Turoff, 1975) and educational policy issues (Adler and Ziglio, 1996). It has not been used significantly in the area of taxation, although examples of its use and usefulness in this field include Birkett (1989) and Evans and Walpole (1999). The problems to which the method is applied are generally complex and lacking simple definition or obvious solutions.

Delphi activities are fundamentally exploratory tools, where individuals plumb their knowledge, share it with others, and use what is shared with them to refine their own thinking. Delphi activities, particularly in the policy context, are not necessarily intended to generate consensus, although it is possible for consensus to emerge. Delphi activities are also not intended to quantify beliefs, although quantification can help focus participation. The goal of Delphi activities is simply to reveal (not create) patterns of thought, areas of consensus or disagreement, or questions to pursue (HERO, 2001).

Most applications of the method use written questionnaires, either mailed or emailed<sup>5</sup>, but face to face individual and group interviews have also been used, as well as computer conferencing procedures (Dunn, 1994).

The number of participants in a Policy Delphi are typically selected to represent a wide range of opinions, and may comprise anything between 10 and 30 (Dunn, 1994), although successful Delphis have been conducted with as few as four (Slocum, 2005). Research generally indicates that 12-15 constitutes a sufficient number of experts to ensure reliable outcomes. The size of the panel is ultimately determined by the nature of the topic under review and the budget of those administering the technique. Unlike traditional statistical surveying, the goal is not to select a representative sample of the population. The whole premise behind the Delphi theory is that the panel members are in fact experts in their field in order to yield more accurate results (Bourgeois et al, 2006). It is also important to ensure that the experts chosen to participate are capable of representing the many sides of the issues under examination – the intention is not to select a panel of experts who would typically have a consensual or homogenous view from the outset (Slocum, 2005, p. 115).

---

<sup>3</sup> Dalkey, however, has claimed that he and Helmer were never entirely happy with the use of the term Delphi, arguing that the term implied “something oracular, something smacking a little of the occult” rather than a methodology designed to identify the best possible outcomes from less than perfect information (Dalkey, 1968, cited in Gunaydin, 2006).

<sup>4</sup> An acronym for Research and Development.

<sup>5</sup> Dedicated software packages for computer based surveys are also available (HERO, 2001).

Rayens and Hahn (2000) outline the major characteristics of the Policy Delphi. It is a multistage process involving the initial measurement of opinions (first stage), followed by data analysis, design of a new questionnaire based on group response to the previous questions, and a second measurement of opinions. Feedback – information about the beliefs of other participants during the first stage survey – is used in the second stage to facilitate consensus on policy beliefs. This process allows participants to reconsider their opinions in the light of the views of other participants and can be repeated until consensus is reached or saturation of opinion occurs.

The number of stages typically ranges between two and five (Cricher and Gladstone, 1998). Rayens and Hahn (2000, p. 309) note that first stage Policy Delphi questions may include four categories of items:

- forecast items, which provide the panel members with a statistic or estimate of a future event. Participants are asked to judge the reliability of the information presented, and typically use response choices which range from “certainly reliable” to “unreliable”;
- issue items, where panel members rank issues in terms of their importance relative to others, generally using a scale that ranges from “very important” to “unimportant”;
- goal items, which elicit opinions about the desirability of certain policy goals, eliciting responses from “very desirable” to “very undesirable”; and
- option items, where respondents identify the likelihood that specific options might be feasible policy goals. For option items the range of responses is usually from “definitely feasible” to “definitely unfeasible”.

Following this first stage, the data are analysed to determine participants’ positions on each interview item. Based on these measurements, which may be quantitative or (most likely) qualitative or a combination of both, some items are omitted from subsequent stages due to lack of variability in response – items for which consensus has been achieved are not included in subsequent stages (Rayens and Hahn, 2000, p. 310).

Three principles typically underpin the Delphi methodology. These are anonymity (although this may be sacrificed where face to face interview processes are utilized), asynchronicity and controlled feedback.

Anonymity, it is argued, ensures that panelists’ personalities do not influence group behaviour. The status of the respondent does not come into play, and panelists may be more willing to offer opinions that might otherwise be seen to be unpopular or risky. In similar vein, panelists may be more willing to change their opinions rather than having to defend a locked-in position that has their name attached to it (Delbecq et al, 1975, cited in HERO, 2001).

One of the most important aspects of a Delphi is the ability – within broad parameters – for the panelists to respond when and how they want to. They are not constrained to discuss the same topic at the same time, as would be the case in, for example, a focus group or other face to face interaction. Asynchronous communication allows the members of the panel to respond at their own convenience.

The third underlying principle – controlled feedback – emphasizes the iterative nature of the Delphi. The results of one activity or question are used to inform the development of the next. It is obviously critical to the success of the Delphi to ensure that results are fed back to panelists in as unbiased a manner as possible.

Studies comparing the Delphi's results with other methods have confirmed the effectiveness of the methodology on the basis of both its capacity to generate ideas and its effective use of participants' time (Ulschak, 1983), as well as its capacity for accuracy when forecasting is involved (HERO, 2001). But the methodology is not without its critics. Makridakis and Wheelwright (1978, cited in Gunaydin (2006)) summarise the general complaints against the Delphi method in terms of (a) a low level reliability of judgements among experts and therefore dependency of outcomes on the particular judges selected; (b) the sensitivity of results to ambiguity in the questionnaire that is used for data collection in each round; and (c) the difficulty in assessing the degree of expertise incorporated into the forecast. Among the major concerns listed by Martino (1978, cited in Gunaydin (2006)) are:

- the simplification urge: experts tend to judge the future of events in isolation from other developments. A holistic view of future events where change has had a pervasive influence cannot be visualized easily. At this point cross-impact analysis is often of some help;
- sloppy execution, both by the research team and the panel of experts: there are many ways to do a poor job. Execution of the Delphi process may lose the required attention easily;
- format bias: it should be recognized that the format of the questionnaire may be unsuitable to some participants, particularly in an international context; and
- manipulation of Delphi: the responses can be altered by the research team in the hope of moving the next round responses in a desired direction.

The research team was conscious of these and other criticisms and shortcomings in the design of the particular Delphi that was employed to investigate issues relating to personal tax reform in Australia, which is explored in the next section.

## USING THE DELPHI IN THE CONTEXT OF PERSONAL INCOME TAX REFORM

### Selection of Panel

The literature is very clear about the critical importance of the selection of the panel of individuals to be involved in the conduct of a Delphi. The panel must obviously comprise experts in the field under review, and the panel must also be capable of adequately and accurately representing a range of possible opinions about the problems or issues being investigated. As noted above, the literature also suggests that the panel should comprise somewhere between 12 and 30 tax experts.

Given that other parts of the broader research project were exploring (by means of surveys and focus groups) the views of "experts" who were tax professionals and representatives of tax professional bodies (as well as non-expert taxpayers more generally), the research team decided that it would exclusively use the Delphi to explore the views of senior tax academics.<sup>6</sup> It was particularly interested in

---

<sup>6</sup> "Senior" was defined loosely as being of professorial rank or possessing a doctorate in the area.

identifying tax academics with a specific interest (evidenced through research and writing) in the field of personal taxation. The research team also wanted to ensure that the panel it chose was capable of reflecting a variety of disciplinary perspectives, and therefore looked for personal tax academics from a mixture of legal, accounting and public finance backgrounds. Finally, the research team was interested in recruiting tax academics from both Australia and overseas, and particularly from broadly comparable tax jurisdictions such as the UK, USA, Canada and New Zealand.

An initial list of some 35 eminent personal tax academics was compiled by the research team, subsequently short listed (on the basis of the research team's own knowledge of, and contacts with, the persons on the list) to 18. All 18 academics were contacted in late 2005 or early 2006 to establish their willingness to participate. Thirteen agreed to participate.<sup>7</sup> The panel of 13 experts comprised six academics from Australia, three from the UK, two from the USA and one from each of New Zealand and Canada. In terms of broad disciplinary background, six would be considered as having a primarily legal background, five come from an economics/public finance perspective and two would be categorized as being from an accounting background – although all 13 would be principally seen as tax experts and many had overlapping expertise.

In line with the key principle of anonymity already noted, the identity of each of the participants was kept separate from other members of the panel, so that only the research team knew the composition of the panel. This anonymity was preserved throughout the process, although in the relatively closed community of tax academia it is quite possible that some of the panel members may have been aware of the identity of some other members of the panel – though none of them would have been aware of the composition of the entire panel.

The research team was therefore satisfied, overall, that the panel that it had assembled had the appropriate expertise, breadth of opinion and internal integrity to be able to provide the sort of feedback and information about personal tax issues that was required in the Delphi phase of the project.

### **Design and Process Issues**

The research team held a number of meetings in early 2006 to establish the specific areas upon which it was looking for input, in the first round of the Delphi, from the panel of experts. Ultimately four broad areas were identified – relating to the general principles underpinning tax policy and tax mix, the personal tax base, tax rates and tax administration. The debate about which aspects and issues to include under these four broad headings was further shaped by some of the outcomes that were emerging from the first phase (micro-simulation of potential personal tax models) and by the realization that panel members would only be prepared to devote a certain amount of time to completion of the first round – none had unlimited time to devote to the Delphi. The survey could therefore not be as long or detailed as might otherwise have been desirable.

The survey instrument used in the first round of the Delphi, and issued on 17 March 2006, is contained in Appendix One. It comprised 21 questions categorized under the

---

<sup>7</sup> Those who declined the opportunity of participating generally cited lack of time or lack of current interest in the personal tax area as the reasons for not taking part.

four headings identified above. Panel members were also given clear instructions about what they were required to do, and some details about the Delphi methodology itself and about personal tax reform in Australia (considered to be vital for international experts). It was decided to administer the survey instrument using email technology – largely on the basis of timeliness, ease of access and general acceptance of that medium within the academic community. At that stage it was anticipated that there would be up to three rounds of questioning involved in the Delphi.

In line with the literature relating to the Delphi process, the 21 questions comprised a mixture of “forecast”, “issue”, “goal” and “option” questions, with an emphasis on the latter two categories. In fact, only one question (Question A3) would readily be classified as a “forecast” question, and only two questions (Questions A2 and B7) are specific “issue” questions. The 18 remaining questions fit broadly equally in either the “goal” or the “option” categories.

Panel members were asked to complete and return the first round surveys within two weeks – by 31 March 2006. Responses were received from nine of the 13 panel members within that timeframe and from the other four within five days of 31 March. This was a somewhat unexpected and exceptionally positive rate of response, perhaps accounted for in part by the novelty of the methodology within the taxation discipline, but perhaps also attributable to the careful priming of the panel by the research team over preceding months.<sup>8</sup> The covering information had suggested that panel members would need about 30 minutes to complete the instrument. This proved to be a significant under-statement, with some panel members indicating that they had spent over an hour on the first round responses.

The information contained in the Round One responses was then collated and analyzed in the period through to mid-June 2006, at which point (18 June 2006) Round Two of the Delphi was issued to the panel. The instructions given to panel members for Round Two are contained in Appendix Two.

The number of questions in Round Two was reduced significantly, from 21 to just six, compared to Round One. This was because the research team found that there was a high level of agreement (or sometimes indifference or expected disagreement) for 15 of the 21 questions asked in Round One. There was therefore no reason to probe those 15 areas any further. Instead Round Two aimed to explore the strength of opinion related to the six key areas upon which consensus had not clearly emerged. These six areas were:

- whether work related expenses should be deductible for salary and wage earners;
- whether negative gearing (the offset of revenue losses, including interest on borrowings, made in holding investments against total income) should be permitted;
- whether certain concessions, including the 50% discount for capital gains, work related expense deductions, superannuation concessions, negative gearing and others, should be removed, and in what priority order;
- what sort and level of tax free threshold might be appropriate;

---

<sup>8</sup> But perhaps the major factor was the enthusiasm, professionalism and diligence of the panel members themselves.



- whether a hybrid flat tax (involving a tax free threshold combined with a flat rate of tax) might be appropriate; and
- whether a negative income tax might provide a viable solution to the problem (particularly experienced in Australia) of high effective marginal tax rates as a result of the poor meshing of the tax and social security systems.

In Round Two panel members were initially reminded of the question or issue that was being raised in each of the six questions and of the response that they had volunteered in Round One. They were also given a customized anonymous summary of the responses of the other 12 panel members combined with their own response (often tabulated), together with a more detailed document that provided, verbatim, the responses to each of the six questions of all 13 panel members. The 13 experts were then separately asked to re-consider their own Round One responses to each of the six questions, with the opportunity to revise or confirm those responses after having considered the anonymous feedback from other experts.

The panel members were again given a two week time period in which to respond. The timeliness of responses in Round Two was nowhere near as good as that in Round One – only seven members were able to submit their responses within the specified period, with two others responding up to five days late, another two responding up to one month after the initial required response date, and one responding seven weeks after the initial deadline. A response from the final panel member was never received, despite the issue of a number of reminders.

## OUTCOMES

The data derived from the Delphi are best examined by separate reference to the answers provided to each of the 21 questions in Round 1 and the six questions that were followed up in Round 2.

### **Delphi Round 1 responses**

#### *Section A: General Principles*

The three questions in Section A (refer Appendix One) were concerned with general principles relating to tax policy and tax mix. All 13 panel members agreed that the four criteria of equity, efficiency, simplicity and revenue adequacy were appropriate as primary criteria for evaluating the quality of a PIT (Question A1). There was also a significant degree of agreement about how the four criteria should be ranked in terms of priority or importance (Question A2), although many of the experts questioned the artificiality of the rankings and qualified their rankings and the process of those rankings.

Table One summarises the outcome of this ranking process, from which it can be seen that there is some agreement that equity is the “most important” of the four criteria (it was ranked first by 9 and second by the other 4 experts), followed in relative order by efficiency, simplicity and revenue adequacy.

**TABLE ONE      RANKING OF RELATIVE SIGNIFICANCE OF PRIMARY TAX CRITERIA (QUESTION A2)**

	<b>Ranked first</b>	<b>Ranked second</b>	<b>Ranked third</b>	<b>Ranked fourth</b>	<b>Weighted score</b>
<b>Equity</b>	<b>9</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>48</b>
<b>Efficiency</b>	<b>1</b>	<b>6</b>	<b>5</b>	<b>1</b>	<b>33</b>
<b>Simplicity</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>26</b>
<b>Revenue adequacy</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>18</b>

*Weighted score is 4 for 1<sup>st</sup>, 3 for 2<sup>nd</sup>, etc.*

The panel members were also asked to identify other criteria which they considered to be important, and “certainty” and “international compatibility” were both mentioned.

The third question (Question A3) in Section A asked the experts for their opinion on whether Australia was overly reliant on the PIT as a major source of tax revenues. There was no real consensus on this aspect, with three experts (including one Australian) agreeing that Australia was over-reliant on the PIT, seven (including four Australians) disagreeing and three (including one Australian) uncertain. The largest number of experts therefore considered that Australia was not overly-reliant on the PIT for its tax revenue.

None of the questions in Section A was selected for follow up consideration in the second Round of the Delphi.

#### *Section B: The Personal Tax Base and Tax Unit*

Twelve of the thirteen panel members agreed (some with minor qualifications) that the tax base for the PIT should be characterised by as broad a base as possible combined with rates that are as low as can be sustained bearing in mind the needs of generating “sufficient” tax revenue (Question B1). The one panel member who disagreed felt that there were strong arguments for having tax breaks in particular circumstances.

Question B2 related to tax expenditures, and asked the experts to identify, in priority order, the Australian tax expenditures that they considered caused the greatest level of distortion of the PIT base (by reference to equity, efficiency and simplicity criteria). Table Two, which summarises the outcome of this ranking process, shows that the CGT discount and superannuation stand out as the tax expenditures considered to cause the greatest degree of distortion. The other tax expenditures appear to be relatively insignificant by comparison.

Three panel members felt unable to provide a ranking.

**TABLE TWO RANKING OF DISTORTIVE IMPACT OF TAX EXPENDITURES (QUESTION B2)**

	Ranked first	Ranked second	Ranked third	Ranked fourth	Ranked fifth	Ranked sixth	Ranked seventh	Weight
<b>50% CGT discount</b>	<b>5</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>59</b>
<b>Superannuation concessions</b>	<b>4</b>	<b>4</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>57</b>
<b>Family Tax Benefit exemption</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>18</b>
<b>Fringe Benefit Tax concessions</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>18</b>
<b>Income Supp Payment exemption</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>10</b>
<b>Social Security Offsets</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>9</b>
<b>Seniors Tax Offset</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>8</b>
<b>Owner Occupied Housing</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7</b>

*Weighted score is 7 for 1<sup>st</sup>, 6 for 2<sup>nd</sup>, etc.*

There was also a significant degree of consensus in panel members' responses to the third question in Section B, which asked the experts to consider whether capital gains should ideally be taxed on the same basis as other forms of income (Question B3). Twelve of the thirteen experts agreed that this should be the case "ideally", though many noted the qualifications to this ideal position that have to be made. The thirteenth member was concerned about the cash flow implications of seeking to tax capital gains in this manner.

By way of contrast, responses to Questions B4, B5 and B6 showed very low levels of agreement among the experts, and were therefore selected for further analysis in Round 2 of the Delphi. Question B4 asked whether all work related expenses should be tax deductible for salary and wage earners. Only one expert considered, unequivocally, that they should, and five considered that they should not. The other seven experts expressed varying degrees of support for the proposition, but the data was entirely inconclusive on this question.

The same was true in Question B5, which sought opinions on whether the "negative gearing" which Australia currently permits for tax purposes on passive investments was justifiable in a tax context. Four experts felt it was justified, seven felt it was not and two were unsure.

Question B6 followed up on issues initially raised in Question B2, and asked the experts to identify – in priority order – the tax expenditures they would remove if they were seeking to broaden the tax base. The results for the 12 respondents (one expert felt too uncertain to offer a response) are in Table Three. They indicate that there was the greatest level of agreement about the desirability for the removal of the CGT discount, with seven out of twelve experts suggesting that this would be their first choice of tax expenditure that could be removed to broaden the tax base, followed by negative gearing, work-related expenses and superannuation concessions. The "other" expenditures that were mentioned were "owner occupied housing" (ranked first by one respondent) and "fringe benefits".

**TABLE THREE RANKING FOR REMOVAL OF TAX EXPENDITURES (QUESTION B6)**

	<b>Ranked first</b>	<b>Ranked second</b>	<b>Ranked third</b>	<b>Ranked fourth</b>	<b>Ranked fifth</b>	<b>Weighted score</b>
<b>50% CGT discount</b>	<b>7</b>	<b>3</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>50</b>
<b>Negative gearing</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>34</b>
<b>Super concessions</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>5</b>	<b>-</b>	<b>26</b>
<b>Work related expenses</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>25</b>
<b>Others</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>7</b>

*Weighted score is 5 for 1<sup>st</sup>, 4 for 2<sup>nd</sup>, etc.*

The final question in Section B (B7) sought the experts' opinion on the appropriate tax unit for the PIT, and offered the possibility of the family, the individual, or hybrids of these. None of the experts considered the family the appropriate unit, and the majority (eight out of thirteen) clearly felt that the individual was most appropriate as the tax unit. Two respondents favoured hybrid arrangements, and three were unsure or unable to offer an opinion on this matter.

#### *Section C: Tax Rates and Thresholds*

Section C was concerned with issues relating to tax rates and thresholds. There was considerable agreement (twelve out of thirteen responses) that tax brackets/thresholds should be automatically indexed (Question C1), although some disagreement as to whether it would be more appropriate to use the Consumer Price Index or Average Weekly Earnings as the benchmark.

One area where no clear and over-arching view was derived from the panel in Round 1 was in relation to the level at which the tax-free threshold should be pitched (Question C2). While seven of the experts agreed that it should be increased up to or beyond the individual poverty line (estimated to be \$13,500), two others thought it should be reduced to zero and the other four expressed no clear opinion. It was therefore considered that this was an area that could be followed up in the second round of the Delphi.

Questions C3, C4 and C6 were concerned with the optimal number of rates in a PIT. Most of the experts considered that a two or three-rate structure would have primarily simplicity and efficiency advantages over Australia's current five-rate structure, and that reduced numbers of tax rates might also reduce avoidance and income splitting activity (Question C3). But eight of the thirteen also identified significant equity and progressivity disadvantages (particularly at the margins) if the number of tax rates were reduced from five to three or two. Most of the experts (ten out of thirteen) would not express a view on the optimal number of tax rates in a PIT system (Question C4). In responding to Question C6, however, ten out of the thirteen experts expressed the view that a flat tax (ie one single PIT rate) was inappropriate for Australia.

There was a reasonably strong view that the corporate tax rate and the top personal tax rate should be aligned (six out of thirteen), or that at least the gap between the two rates should be reduced (a further four out of thirteen) (Question C5).

Questions C7 offered the possibility of a flat tax combined with a tax free threshold (the so-called hybrid flat tax), and this option elicited some support from the experts: five were willing to consider the possibility of implementing it in a developed economy such as Australia, and another two indicated that they could be supportive in

particular circumstances. But six experts rejected the idea for Australia outright. Given the relatively clean split of opinion on this issue, it was decided that this was another question that would be included in Round 2 of the Delphi.

The final question in Section C was also identified for follow-up in Round 2. Question C8 sought the experts' views as to whether a properly implemented negative income tax could provide a viable solution to the problem of high effective marginal tax rates (EMTRs) in Australia. Five experts considered that it could; two considered that it could in particular circumstances; three felt that it could not; and three expressed no view.

#### *Tax Administration*

The final section of the Round 1 Delphi contained three questions relating to tax administration. The first (Question D1) was designed to elicit the experts' views on what advantages and disadvantages might arise if the Australian PIT were re-designed to remove the obligation to file for most personal taxpayers. As might be expected, on the positive side most (ten out of thirteen experts) saw the possibility of reductions in compliance and administrative costs, or other unspecified gains to simplicity. When considering the potential disadvantages of less comprehensive annual filing, five comments mentioned issues relating to "non-compliance" – comprising encouragement of the cash economy (two responses), loss of revenue (one), extension of the tax gap (one) and less accurate tax structure (one).

Question D2 delved a little deeper into the possibility of reduced annual filing and sought the panel members' views on the factors, or "enabling agents" that might permit reduced annual filing. There was some, but not by any means overwhelming, support for the four factors that were identified (fewer tax rates and thresholds; a cumulative PAYE/PAYG system; comprehensive tax deduction at source mechanisms; and the removal of work related deductions for salary and wage earners), and no further factors were suggested by the experts.

The final question in Round 1 (D3) was concerned with potential support for a CGT annual exempt amount or tax free threshold to act as a de minimus mechanism to weed out relatively insignificant capital gains from the tax base. Eight out of thirteen panel members considered this a justifiable compromise between equity and simplicity, while a further two either did not express a view or did not know. Only three of the experts were opposed to the idea. There was less agreement, however, about the level at which this annual exempt amount should be pitched, with suggestions ranging from \$2,500 to \$20,000.

#### **Delphi Round 2 responses**

As noted above, 15 of the 21 Round 1 Delphi questions elicited either a significant degree of agreement from the experts, or it was clear that the panel members were never likely to develop a consensual position, as a result of indifference or polarization of opinions. The focus in Round 2 therefore shifted to six questions (B4 relating to work related expenses; B5 relating to negative gearing; B6 relating to tax expenditures; C2 relating to the tax free threshold; C7 relating to the hybrid flat tax; and C8 relating to the negative income tax) where attitudes and opinions did not appear to be so clear-cut or strongly held. The experts were confronted with their own and with their peers' responses to determine whether they were willing to shift their views and move towards a more consensual position.

Table Four summarises the outcomes of the second round of the Delphi. Although the process of summarizing is necessarily impressionistic, qualitative and somewhat simplistic, it does accurately capture the sense that the opinions of the experts, once formulated, were hard to shift, even when confronted with defending a minority position in the face of peer pressure. There is very little evidence of views being changed, and where changes did occur they were often relatively insignificant or minor in nature, and sometimes explained on the basis of a misunderstanding in Round 1.

**TABLE FOUR SUMMARY OF CHANGES IN ROUND 2 FROM ROUND 1**

Question	B4	B5	B6	C2	C7	C8
No change	11	11	9	10	10	12
Change	1	1	3	2	2	0

Only five of the twelve experts who participated in Round 2 changed a position in relation to any one of the six questions. One respondent recorded a change of opinion on three separate questions; two respondents recorded changes on two separate questions; and two respondents recorded a change on one question. Most respondents, however, maintained their positions on all questions.

In summary, therefore, there was little evidence of changes in opinion as a result of the second round of the Delphi, and little evidence of the likelihood of a consensus emerging on the six questions that were under review. On that basis it was decided not to continue with a third round of the Delphi.

## CONCLUSIONS

It is relatively simple to offer conclusions about the process of the Delphi methodology, but more difficult to provide definitive conclusions about the value of the data derived from that process.

So far as methodology is concerned, the Delphi used in this particular project was remarkably easy to operate, and from that perspective it compares very favourably with other methodologies designed to elicit opinions and attitudes. It also proved to be cheap to administer, and the choice of an electronic (email) platform proved to be very effective. Response rates and times were good, and the cooperation of the experts was generally exceptional.

The most problematic area was in the design of the Delphi, and particularly in framing questions in such a way as to measure the strength or value of changes in responses that can occur over successive rounds. The questioning technique adopted in this particular Delphi was to leave questions open-ended, in order to give the experts as much opportunity as possible to express opinions. This was a perfectly justifiable approach, but in hindsight it made the measurement of change of opinion a very difficult task. A Policy Delphi is, in essence, a qualitative rather than a quantitative methodology, and does not lend itself easily to statistical analysis. If the process were to be repeated, however, it is quite likely that there would be a greater reliance on Likert scales, which can produce measurable outcomes, for many of the questions, rather than the heavy reliance on open-ended questions.

The Delphi has provided the research team with clear insights into a number of areas where there is broad international consensus on certain aspects relating to the design

and development of the PIT in an open developed economy, and has also highlighted other areas where there is no consensus. It has established, *inter alia* that:

- there is broad support from the experts for the generally accepted criteria of equity, efficiency, simplicity and revenue adequacy as appropriate criteria for evaluating a PIT, with general agreement that equity ranks as the single most important criterion;
- there is no general agreement, however, about the appropriate role of the PIT in the overall tax mix;
- there is general agreement that the Australian PIT should be characterized, so far as possible, by as broad a base as possible combined with rates that are as low as can be sustained;
- the experts consider, on the whole, that the individual is a more appropriate tax unit than the family;
- there is a strong view expressed by the experts that the superannuation concessions and the 50% CGT discount are the tax expenditures that cause the greatest level of distortion within the Australian PIT. Moreover, the experts generally agree that the CGT discount would be the first choice of tax expenditure that could be removed to broaden the tax base, that “ideally” capital gains should be taxed on the same basis as other forms of income, and that there are strong grounds for introducing a *de minimus* annual exemption to remove relatively insignificant capital gains from the tax base;
- there is strong endorsement for the view that all income tax brackets or thresholds should be indexed annually for inflation, though less agreement on precisely how this elimination of bracket creep should be implemented;
- the experts generally agree that alignment of the corporate rate and top personal rate (or at least a reduction in the gap) is desirable, but there is no general agreement on the optimal number of tax rates or scales that should be contained in a PIT;
- the experts can identify significant advantages that are likely to ensue with less comprehensive annual filing (primarily relating to simplicity and compliance costs) but also identify some disadvantages (primarily related to the capacity for non-compliance that less filing might permit); and
- there is little agreement – even after experts were given the opportunity to reconsider their positions in the light of the views of their peers – on key design issues such as the deductibility of work related expenses, rules relating to negative gearing, the level of the tax free threshold, or on the potential for alternatives such as a negative income tax or a hybrid flat tax to counter some of the problems associated with Australia’s PIT.

The product of the Delphi has therefore been useful in a confirmatory, developmental and clarifying role. It has reinforced outcomes that have emerged from other parts of the broader project. This use of the Delphi for triangulation purposes alone has been sufficient justification for its adoption. Moreover, the Delphi has provided the research team with clarification on a number of issues, and has provided a rich seam of information that has repaid detailed mining. The outcomes have also assisted, in a developmental fashion, in shaping the future direction of the research.

## REFERENCES

- Adler, M. and Ziglio, E. (1996), *Gazing into the Oracle: The Delphi Method and its Application to Social Policy and Public Health*, Taylor and Francis, Philadelphia.
- Andrew, B. (2005), "Reform of the Australian Personal Tax System", *Asia-Pacific Journal of Taxation*, Vol 9(3), pp 46-55.
- Australian Bureau of Statistics (2004), *Year Book Australia 2004*, Table 27.16, Canberra.
- Australian Taxation Office (2005), *Taxation Statistics 2002-03*, Table 2.1, Canberra.
- Birkett, W. (1989), *The Demand For, and Supply of, Taxation Education: A Delphi Study*, Task Force for Accounting Education in Australia, Sydney.
- Bourgeois, J., Pugmire, L., Stevenson, K., Swanson, N. and Swanson, B (2006), The Delphi Method: A Qualitative Means to a Better Future, accessed at [http://www.freequality.org/sites/www\\_freequality.org/Documents/knowledge/Delphi method.pdf#search=%22Laura%20Pugmire%20Delphi%22](http://www.freequality.org/sites/www_freequality.org/Documents/knowledge/Delphi%20method.pdf#search=%22Laura%20Pugmire%20Delphi%22) 16 August 2006.
- Critcher, C. and Gladstone, B. (1998), "Utilizing the Delphi Technique in Policy Discussion: A Case Study of a Privatized Utility in Britain", *Public Administration* 76: 431-449.
- Dunn, W. (1994), *Public Policy Analysis: An Introduction* (2<sup>nd</sup> ed.), Prentice Hall, New Jersey.
- Evans, C. (2004), "Diminishing Returns: The Case for Reduced Annual Filing for Personal Income Taxpayers in Australia", *Australian Tax Review* 33(3): 168-81.
- Evans, C. and Drum, P. (2006), "Ten Million Reasons for Personal Tax Reform in Australia", in *Further Global Challenges in Tax Administration*, (edited McKerchar M and Walpole M), Fiscal Publications, Birmingham, pp 377-394.
- Evans, C. and Walpole, M. (1999), *Compliance Cost Control: A Review of Tax Impact Statements in the OECD*, Australian Tax Research Foundation (Research Study No. 27), Sydney.
- Evans, C., Ritchie, K., Tran-Nam, B. and Walpole, M. (1997), *A Report into Taxpayer Costs of Compliance*, Australian Government Publishing Service, Canberra.
- Fowles, J. (1978), *Handbook of Futures Research*, Greenwood Press, Connecticut.
- Gunaydin, H. (2006), *The Delphi Method*, Optimization Group, accessed at <http://www.iyte.edu.tr/~muratgunaydin/delphi.htm> 16 August 2006.
- Helmer, O. (1983), *Looking Forward: A Guide to Futures Research*, Sage Publications, Beverley Hills.
- HERO (Human-Environment Regional Observatory) (2001), The HERO e-Delphi System: Overview and Implementation, Pennsylvania State University, accessed at <http://hero.geog.psu.edu/index.jsp> 16 August 2006.
- Linstone, H. and Turoff, M. (Eds) (1975), *The Delphi Method: Techniques and Application*, Addison-Wesley, Reading, MA.



OECD (2005a), *Revenue Statistics 1965-2004*, Table 10, p 72, Paris.

OECD (2005b), *Survey of Trends in Taxpayer Service Delivery Using New Technologies*, Centre for Tax Policy and Administration, Table 9, Paris.

Rayens, M. and Hahn, E. (2000), "Building Consensus Using the Policy Delphi Method", *Policy, Politics and Nursing Practice*, Vol 1 No 4: 308-315.

Rainhorn, J., Brudon-Jakobowicz, P. and Reich, M. (1994), "Priorities for Pharmaceutical Policies in Developing Countries: Results of a Delphi Survey", *Bulletin of World Health Organisation* 72: 257-264.

Slocum, N. (2005), *Participatory Methods Toolkit: A Practitioner's Manual: Delphi*, King Baudouin Foundation and Flemish Institute for Science and Technology, Belgium.

Tran-Nam, B., Addison, G., Andrew, B., Drum, P. and Evans, C. (2006), "Personal Income Tax Reform in Australia: The Way Forward", *Australian Tax Forum*, Vol 21, No 3, pp.441-463.

Ulschak, F. (1983), *Human Resource Development: The Theory and Practice of Need Assessment*, Reston, Virginia pp111-131.

Weaver, W. (1971), *The Delphi Forecasting Method*, Bloomington, *Phi Delta Kappa*, Vol 52, No 5, pp. 267-273.

**APPENDIX ONE: ROUND ONE INSTRUMENT****Delphi: Round One (March 2006)**

Dear Colleague

Many thanks for agreeing to participate in this Delphi methodology involving a panel of 12-15 international academic experts in the field of taxation. This is the first round of the Delphi and we provide some background and context about the project and the Delphi immediately below and in the appendix. We expect to conduct the second and third rounds (where you will anonymously comment on the views of the other panel members with a view to seeking a consensus) in April to June 2006.

**Background and context to the research project**

We are currently involved in an Australian Research Council (ARC) funded research project entitled *“Towards systemic reform of the Australian personal income tax: Developing a sustainable model for the future”*.

The aim of this project is to develop a model of the Australian personal income tax system that is capable of commanding widespread expert and community support while still delivering the expected revenue flow and tax policy objectives. In this way, we hope the project will inform and influence the contemporary debate about reform of the Australian personal income tax (PIT).

Further background information about the project and the Australian PIT is contained in Appendix A, which members of the panel from overseas may find particularly useful.

**About the Delphi methodology**

The Delphi methodology “operates on the principle that several heads are better than one in making subjective conjectures ...and that experts will make conjectures based upon rational judgement rather than merely guessing” (Weaver, 1971, p. 268). The methodology was originally developed in the 1950s by Norman Dalkey and Olaf Helmer, and combines quantitative and qualitative techniques to explore future possibilities. Studies comparing the Delphi’s results with other methods have confirmed the effectiveness of the methodology on the basis of both its capacity to generate ideas and its effective use of participants’ time (Ulschak, 1983). It has not been used significantly in the area of taxation, although examples of its use and usefulness in this field include Birkett (1989) and Evans and Walpole (1999).

In essence it is “a systematic, iterative method of forecasting based on the collection of opinions from a group of experts. Its objective is to obtain a consensus of opinion from these individuals about future trends, events or changes in a field of practice; or alternatively, to clarify and perhaps explain the nature of revealed dissent or divergence of opinion” (Carley, 1980, quoted in Birkett at page 4). Birkett goes on to note that it “replaces open debate by a carefully designed program of anonymous testing...[utilizing] a nominal group technique; members of the group are confronted by the opinions of other members, but face to face interaction does not occur”. Anonymity ensures that the biasing effect of group pressures, dominant individuals and the like does not occur.

The project is using the Delphi methodology to engage a panel of 12-15 international PIT experts in an electronic iteration of questioning and analysis of some of the initial modelling that has taken place in our research project. (Research indicates that 12-15

constitutes a sufficient number of experts to ensure reliable outcomes.) Up to three rounds of questioning (over a four month period) about the perceived advantages and weaknesses of the models developed in the first modelling phase is being conducted in an attempt to seek expert coalescence about the characteristics of a model that can best provide the policy objectives required of the PIT. The Delphi panel comprises PIT experts from Australia and from comparable tax jurisdictions (New Zealand, the UK, Canada and the USA). We are hoping that many of these international experts will later be able to participate in a PIT Symposium scheduled for March/April 2007.

### **DELPHI ROUND ONE**

This first round of the Delphi contains four sections. Section A seeks your views on some broad tax principles and the tax mix, while Sections B-D seek your input on more specific issues relating to (respectively) the personal tax base, personal tax rates, and personal tax administration issues.

Feel free to write, in open-ended sections, as much or as little as you please (do not feel constrained by the space available). As you will appreciate, there are no right or wrong answers – we are merely seeking your opinions with a view to identifying what level of consensus (if any) may initially exist within the panel. Future rounds (we anticipate that there will be two further rounds) will (anonymously) seek feedback on the views of members of the panel and further seek to develop a consensus (which may prove impossible!).

We have estimated that you should not need more than about 30 minutes to respond to these questions. We would really appreciate it if you could complete the Round One Survey below and return the document to Chris Evans (email [cc.evans@unsw.edu.au](mailto:cc.evans@unsw.edu.au) or fax +612 9385 9383) by 31 March 2006.

Please move to the next page to commence the Delphi.

Chris Evans  
Binh Tran-Nam  
Brian Andrew  
Paul Drum

Atax, UNSW  
Atax, UNSW  
Charles Darwin University  
Senior Tax Counsel, CPA Australia

March 2006

**Section A      General Principles**

The research team has adopted, as a starting position, the oft-cited criteria of “equity”, “efficiency” and “simplicity” along with “revenue adequacy”, as the appropriate criteria for evaluating the Australian PIT.

**A1**      Do you consider these four criteria (equity, efficiency, simplicity and revenue adequacy) are appropriate as the primary criteria for evaluating the quality of a PIT? If not, what other criteria would you suggest, and why?

**A2**      What is your ranking, as a tax expert, of the relative significance (in terms of priority or importance) of the following criteria in the design and evaluation of a PIT (where 1 is the criterion that should be assigned the highest priority or importance, 2, the second highest and so on):

<b>Criterion</b>	<b>Ranking</b>
<b>Equity</b>	_____
<b>Efficiency</b>	_____
<b>Simplicity</b>	_____
<b>Revenue adequacy</b>	_____
<b>Other(s) (please specify) _____</b>	_____

**A3**      In Australia, in 2004, tax revenue from the PIT was just over 12% of GDP, compared to an OECD average of just under 10% (OECD Revenue Statistics 2004). By way of comparison, the figure for New Zealand was just over 14%, for the UK it was 10%, for the USA it was 9% and for Canada it was nearly 12%. Excluding social security contributions, in 2001 the personal income tax accounted for about 41% of total taxes in Australia, compared to an OECD average of 26.5% (OECD Revenue Statistics 1965-2002).

On the basis of your experience/views and also the data provided above, do you consider that Australia is overly reliant on the PIT as a major source of tax revenues? (Yes/No/Don't know is fine, but any elaboration will be useful, particularly relating to what you consider might be an appropriate tax mix for a developed economy such as Australia.)

**Section B      The Personal Tax Base and Tax Unit**

**B1** It is often suggested that the PIT should be characterised by as broad a base as possible combined with rates that are as low as can be sustained bearing in mind the needs of generating “sufficient” tax revenue. Do you generally support this view? If not, how would you describe the approach that you think is appropriate in the design of the PIT base in a developed economy?

**B2** The Tax Expenditures Statement 2005, published by the Australian Treasury indicates that tax expenditures have risen from AUD\$30b\* in 2001-02 to AUD\$39b in 2005-06, though remaining at about 4.1% of GDP over the period. The main tax expenditures listed in the statement were:

(\* AUD\$1 = approx US\$0.73 or £0.42 or CAN\$0.85 or NZ\$1.15 as at 13 Mar 06.)

Concessional taxation of superannuation	AUD\$15.5b
The CGT discount for individuals	AUD\$4.4b
Exemption of Family Tax Benefits	AUD\$2.5b
Seniors Tax Offset	AUD\$1.8b
Social security Offsets	AUD\$1.4b
Fringe Benefits Tax Concessions	AUD\$1.1b
Exemption of income support payments	AUD\$0.9b

From your existing knowledge of the Australian PIT (which we appreciate may be limited for overseas experts), which tax expenditures (in priority order, where 1 is the most significant and 2 is the next most significant) do you consider cause the greatest level of distortion (by reference to the equity, efficiency and simplicity criteria) of the PIT base.

**B3** Ideally (and as a broad generalisation), should capital gains (as commonly understood) be taxed on the same basis as income from personal exertion and income from passive investments (interest, rent etc) and other income sources? If this is not your view, how and why should capital gains be treated differently from other sources of income?

**B4** Should all work related expenses be tax deductible for salary and wage earners? (Yes/No/Don’t know is fine, but any elaboration will be useful.)

**B5** Australia (unlike many other comparable regimes) currently permits individuals who incur losses on revenue account as a result of holding passive investments (equities, property etc) to set those losses off against any other income including income from salary and wages (so-called “negative gearing”).

Is this treatment justified? If not, what treatment might be more appropriate?

**B6** If you were seeking to broaden the tax base in Australia, what priority order would you apply in removing each of the following concessions (where a ranking of 1 would suggest that this would be your highest priority for removal, 2 would be the second highest etc):

Concession	Ranking
The 50% discount for capital gains	_____
Work related deductions	_____
Superannuation concessions	_____
Negative gearing concessions	_____
Other (please specify) _____	_____

**B7** Australia (in common with many other comparable PIT regimes) bases its PIT on the individual (although its social security system is often predicated upon the household or family unit). In your estimation, what is the ideal tax unit for the PIT: the individual, the family, hybrids of this or other? Why?

**Section C Tax Rates and Thresholds**

The 2006-07 Australian PIT rate structure for residents involves a five rate structure with marginal tax rates (MTRs) as follows:

<b>Taxable Income (AUD\$)*</b>	<b>MTR (%)</b>
0 – 6,000	Nil
6,001 – 21,600	15
21,601 – 70,000	30
70,001 – 125,000	42
> 125,000	47
* AUD\$1 = approx US\$0.73 or £0.42 or CAN\$0.85 or NZ\$1.15 as at 13 Mar 06	

In addition a Medicare levy of 1.5% is charged on income greater than AUD\$17,191, and there are various rebates and offsets including a low income rebate.

**C1** In your estimation, should all tax brackets/thresholds be automatically indexed on an annual basis in line with inflation? (Yes/No/Don't know is fine, but any elaboration is welcome.)

**C2** Currently around 40% of taxpayers in Australia pay no net tax because of a range of rebates and concessions, and the two lowest income deciles have almost zero taxable income and do not benefit from the tax free threshold.

If reform of the Australian PIT were undertaken, which of the following options would you prefer to see implemented with respect to the initial tax free threshold (currently AUD\$6,000):

- Option A: Increase it to the individual poverty line (currently approx AUD\$13,500).
- Option B: Increase it above AUD\$13,500.
- Option C: Leave it unchanged.
- Option D: reduce it to zero.
- Option E: Other (please specify)\_\_\_\_\_

Preferred Option (specify A, B, C, D or E): \_\_\_\_\_

(Feel free to elaborate on your preferred option.)

**C3** Assuming the revenue impact can be neutralised (ie that the same tax revenue can be generated) and that there are no adverse distributional outcomes, what advantages or positive benefits could you envisage if Australia were to implement a two or three rate PIT rate structure (rather than the current five rate structure)? What disadvantages or negative implications might arise?

Advantages/positive implications:

Disadvantages/negative implications:

**C4** Is there an optimal number of rates and thresholds for an equitable, efficient and simple PIT system? If yes, indicate that optimal position and say why. If no, indicate why not?

**C5** The current top marginal PIT rate is 47%. The corporate rate is 30%. Ideally, should the rates be aligned? (Yes/No/Don't know is fine, but any elaboration is welcome. If you do not consider full alignment is possible, are there grounds for seeking, at least, to reduce the gap?)

**C6** Should a flat tax (ie one single PIT rate) be considered as an option in a developed economy such as Australia? (Yes/No/Don't know is fine, but any elaboration is welcome.)

**C7** Should a hybrid flat tax (i.e. a tax free threshold plus a flat rate) be considered as an option in a developed economy such as Australia? (Yes/No/Don't know is fine, but any elaboration is welcome.)

**C8** Australia has a particular problem with high effective marginal tax rates (EMTRs) as a result of the poor meshing of its tax and transfer systems. For example, middle and lower income recipients can face EMTRs in excess of 60% (and sometimes over 100%). Can a properly implemented negative income tax provide a viable solution to the problem of high EMTRs? (Yes/No/Don't know is fine, but any elaboration is welcome.)



## **Section D Tax Administration**

**D1** In some comparable PIT systems (for example the UK and New Zealand), only a minority of personal taxpayers are obliged to file an annual tax return. In Australia (as in the USA) all personal taxpayers are obliged to file.

What advantages do you envisage if the Australian PIT were re-designed such that most personal taxpayers would no longer be required to file on an annual basis?

What disadvantages might there be if this were the case?

**D2** It has been suggested that the principal conditions precedent or “enabling agents” to permit a significant reduction in the number of taxpayers required to file an annual tax return in Australia would include:

- Fewer rates of tax and thresholds;
- A cumulative Pay As You Earn (PAYE) or Pay As You Go (PAYG) system;
- Comprehensive tax deduction at source mechanisms (to cover interest and dividend withholding as well as PAYE /PAYG etc);
- Fewer (or no) work related deductions for salary and wage earners.

Do you agree that these are the principal conditions precedent or “enabling agents” that would permit reduced annual filing? (Yes/No/Don’t know is fine, but any elaboration is welcome.)

Are you aware of any further conditions precedent or “enabling agents” that would assist in reducing the number of annual filers?

**D3** Some countries (for example the UK) provide an annual exempt amount or tax free threshold for personal taxpayers making capital gains in order to “weed out the minnows and tiddlers”. (In the UK there is currently an annual exempt amount of approximately AUD\$20,000.)

Do you consider that this de minimus rule is a justifiable compromise between equity and simplicity? (Yes/No/Don’t know is fine, but any elaboration is welcome.)

If you do consider that an annual exempt amount is justifiable, what is the maximum amount that you would consider appropriate for the exemption? (Feel free to express it in your own currency, so long as you clearly specify the currency involved.)

Many thanks for your assistance in this project. Your input is greatly appreciated. Please return the document to Chris Evans (email [cc.evans@unsw.edu.au](mailto:cc.evans@unsw.edu.au) or fax +612 9385 9383).

*Appendix A Further Background*

In recent years Australia has undergone significant but incomplete reforms of its taxation system, largely as a result of the Government's proposals in *A New Tax System* (Treasury, 1998) and the Review of Business Taxation (Treasury, 1999). The focus of these reforms has been on business and indirect taxation, including the introduction of the GST. However, other than moderate income tax cuts (already largely eroded by fiscal drag) and changes to the low income rebates, there has yet to be a genuine attempt to work with the community to develop and implement a personal tax regime that can begin to address a number of defects that are apparent in the current regime.

This is surprising, given that the personal tax system affects most Australian taxpayers. Over 10 million out of 12 million taxpayers (85.5%) are individuals, and more than 6 million of these are "simple" salary and wage earners and/or individuals with less than \$1000 non-business income (Australian Taxation Office, 2003, Tables 2.1 and 2.2). There is, in Australia, a heavy reliance on personal taxation as a source of revenue relative to other comparable countries. In Australia in 2000-01, personal taxation accounted for 40.2% of total revenue collection (Australian Bureau of Statistics 2004, Table 27.16); the corresponding average for OECD was 26.5% (Warren 2004, Table 3.1, p 53).

The PIT therefore has both high visibility and high impact – it is a crucial component of the overall Australian tax system. But it is also a system with many perceived defects, and there has been widespread demand for reform from academics, think tank organisations and tax professional organisations over the years (see, for example, Freebairn 1997, Evatt Foundation Group 1999, ACOSS 2003, Saunders 2003 and CPA 2004). The growing demand for PIT reform has identified and considered major problems with respect to the tax base, tax rate/threshold (including effective marginal tax rates) and administration of the Australian PIT system.

In terms of revenue security, the Australian personal income tax base has been undermined on a number of fronts, primarily as a result of (i) ad hoc decisions to grant tax exemptions, deductions and rebates (often to specific groups), (ii) different entities being taxed differently (individuals, trusts, companies), and (iii) a resilient tax avoidance/evasion culture. The tax-base areas of the PIT which need repair cover a wide range of issues, including tax expenditures, Capital Gains Tax (CGT), negative gearing, wealth taxes, work-related expenses and artificial tax minimisation. The project proposes that priority should be given to broadening the income tax base, as a way of facilitating the reduction of tax rates.

In terms of tax rates and thresholds, it is important to recognise that the Australian PIT system differs from those of most other OECD countries in that other countries impose separate social security tax and sub-national income taxes. After allowing for these differences, Australia's high marginal rates still apply from relatively low income thresholds by international standards. There is a case to be made for cuts in PIT, where these can be made in a fair and responsible manner. In considering such rate cuts, it is important to be mindful of the interaction between the PIT and the welfare system. Currently social security recipients face very high effective marginal tax rates on earnings. This requires urgent reform in the tax system or the welfare system or both.

In terms of administration, the costs of complying with the PIT in Australia are relatively high. A study by Evans et al (1997, Table 5.3, p 65) estimated the compliance costs of individual taxpayers in 1994–95 at about \$b2.9, corresponding to 5.6% of individual tax revenue or 0.63% of GDP. Excluding sole traders, the compliance costs of non-business individuals in 1994–95 were estimated at \$b1.5, corresponding to 4% of relevant tax revenue or 0.34% of GDP. These considerable costs have led to calls for tax simplification, which include proposals for reducing annual filing for non-business individual taxpayers in Australia (see, for example, Evans 2004).

The above discussion clearly indicates an urgent need for reforms in the Australian PIT system with a view to developing a healthier tax culture and a simpler, fairer and more efficient PIT system which is revenue robust, acceptable to stakeholders and sustainable over time. As a way forward, this project intends to combine various research techniques in an innovative way to:

- construct and test, using micro-simulation techniques, a series of hypothetical models of the personal income tax system in order to establish which models can best deliver the required policy outcomes of assured revenue collection with the optimal blend of equity, efficiency and simplicity;
- subject the “best” of these models to scrutiny and analysis by a panel of international tax experts (using a Delphi methodology) in order to establish strengths and potential weaknesses in the models and seek to establish a consensus around one single model;
- survey tax community attitudes to this expert-derived model in order to establish levels of potential resistance/acceptance by key stakeholders including tax payers, tax practitioners, tax professional bodies and tax administrators; and
- fine-tune or revise the model to reflect community feedback.

Personal tax reform of a systemic nature will not take place overnight, and this project will help to ensure that the debate takes place on an informed and politically independent basis, using best international practice as a guide and with the assurance of extensive consultation with interested parties. Most importantly, the project will seek to ensure that any tax policy changes are not considered in a vacuum. Sensible tax reform must be informed by an understanding of the impact that reform will have on the tax and compliance burdens that taxpayers will face and the administrative costs that the revenue authority (and therefore, ultimately, taxpayers) will be required to carry. As Grbich (1990) has noted, “by integrating the design and implementation of taxes, to cut down on the inconvenience for ordinary taxpayers and compliance costs, significant gains can be made in the legitimacy of the tax system”.

The development of an acceptable and sustainable personal tax model will greatly assist in the tax reform process, ensuring that informed and dispassionate debate can take place in what is always a politically sensitive area. The research needs to be undertaken by independent researchers, as Treasury and Taxation Office-led proposals inevitably face the difficulty that they are perceived to lack independence. For these reasons, it would not be appropriate to seek partnerships with formal Government agencies in this project. In contrast, the partnership of multi-disciplinary tax academics with a broadly based representative body such as CPA Australia does not run the risk of the outcomes being treated as inevitably biased.

All of the methodologies involved in the project are mainstream research tools, and have been used in many other research projects. Indeed, the proposed researchers have successfully utilised each of these methodologies in their own recent work. Professor Andrew has extensively applied the micro-simulation technique in his study of the Australian tax system (Andrew 1996; CPA, 1998) and A/Prof Tran-Nam has had considerable experience in dealing with unit record data (eg, Tran-Nam and Whiteford 1990; Tran-Nam and Podder 2003). Prof Evans has successfully utilised the Delphi methodology in research into the use of Tax Impact Statements in the OECD (Evans and Walpole, 1999) and all three CIs have extensively used survey techniques of various types (eg, Gul; Teoh and Andrew, 1989; Evans et al, 1997; Tran-Nam and Glover 2002).

What is innovative and unique about the research design of this project is that the CIs propose to combine all three methodologies in the context of the development of a viable personal tax model. While each of these research methodologies has been employed in the past, it will be the first time that they are combined together in a single study. Greene, Caracelli and Graham (1989, pp. 255-263) identify a number of purposes for combining methodologies from different research paradigms in a single study. These include the ability to 'triangulate' outcomes in the classic sense of seeking convergence of results, and the ability to identify 'complementary' outcomes, in that overlapping and different facets of a phenomenon may emerge. Other purposes include 'development' (wherein methods are used sequentially to help to inform outcomes from other methods), 'initiation' (wherein contradictions and fresh perspectives emerge) and 'expansion' (wherein the mixed methods add scope and breadth to a study). The researchers see all of these strengths adding value to the project, although the principal drivers are clearly the opportunities for 'development' and 'initiation'.

Any analysis of the process through which tax reform (culminating in the implementation of legislative change) takes place (see for example, Robinson and Sandford, 1983; Arnold, 1990; Treasury 1999; Sandford 2000) will illustrate a number of key points. The process is complex, but there are certain elements (conception of the ideas for change, formulation of the ideas, consultation, preparation for the legislative process, legislation, implementation, monitoring and modification) that are core. The phases may appear to be sequential, but they are in fact highly inter-dependent and iterative. The process is integrated, and consultation (with taxpayers, tax practitioners and more likely their representative professional bodies) at all stages is increasingly seen as a vital factor in achieving effective outcomes. Responsibility for particular elements may be allocated to one government department or another, but ultimately responsibility has to be shared. The approach has to be multi-disciplinary and effective means of communication between the various stakeholders from the public and private sectors have to be in place.

Above all, the process is highly political. It is not trite to continuously remind ourselves that "tax is politics with a dollar sign in front." For reform to succeed there has to be a clear recognition of who are the winners and who are the losers. There also has to be an ability to package the reforms such that the former can recognise their gains and the latter do not consider that they have only lost. The shared concern about the need for reform of the Australian PIT, shown by all of the current stakeholders, makes reform more straightforward and achievable.

It is within this conceptual framework that the design of the current project has taken place. The three major methodologies involved – micro-simulation, Delphi methodology and survey – feed off each other and into each other as an iterative loop.

**APPENDIX TWO: ROUND TWO INSTRUMENT (INSTRUCTIONS ONLY)****Towards Systemic Redorm of the Australian Personal Income Tax:  
Developing a Sustainable Model for the Future  
Delphi: Round Two (June 2006)**

Dear Colleague

Many thanks for submitting your responses to the first round of the Delphi in March/April. We have now had the opportunity to collate the responses from the 13 members of the panel. We found that there was a high level of agreement (or sometimes indifference or expected disagreement) for 15 of the 21 questions we asked in Round One and so do not wish to probe those 15 areas any further.

We are therefore focusing on just six of the original questions in this Second Round, and in the separate pdf attachment (Delphi Round One\_Summary for Round Two\_Jun 06) you will find the responses for all 13 panel members to the six questions we are probing more deeply in this second round: Questions B4, B5, B6, C2, C7 and C8). Please print them off (seven pages) and refer to them when you are responding to this second round of the Delphi.

(Incidentally, if you would like a copy of the document which anonymously collates the responses of all 13 panel members to all 21 questions, please flick me an email and I will forward it to you. We are conscious that we do want to over burden you with data so have not automatically sent it.)

In this survey document, for each of the six questions, we provide below:

- The six Round One questions we asked you to respond which we are now probing further. These questions are *italicized* for easy identification;
- Your personal responses to each of those six Round One questions. These are underlined for easy identification;
- The summarised responses to each of the Round One question from the 13 member panel of experts (including your response): we refer to this as the “group response”. The group response is **emboldened** for easy identification; and
- a space, immediately below the group response, for you to comment on the responses of other panel members and to re-consider your original responses (this section is in **red** for easy identification). This is the essence of the second round of the Delphi – an opportunity for you to re-evaluate your response in the light of the responses received from the rest of the panel. Please use the space to indicate any comments, amendments or revisions that you may wish to make to your original response in the light of other responses, or any further thoughts on the matter you may have. Simply leave the space blank if you do not wish to change your original response and have no comments to add.

We have estimated that you should not need more than one hour to respond to these questions. We would really appreciate it if you could complete the Round Two Survey below and return the document to Chris Evans (email cc.evans@unsw.edu.au or fax +612 9385 9383) by 30 June 2006.

Please move to the next page to commence the Delphi.

# The Marginal Cost of Public Funds for Excise Taxes in Thailand<sup>†</sup>

**Worawan Chandoevrit\* and Bev Dahlby\*\***

## *Abstract*

We extend the Ahmad and Stern (1984) framework for calculating the marginal cost of public funds (MCF) for excise taxes in Thailand by incorporating non-tax distortions caused by (a) environmental externalities, (b) public expenditure externalities, (c) market power in setting prices, (d) addiction, and (e) smuggling or tax evasion. Our calculations, based on our benchmark parameter values, indicates that the MCFs are 0.532 for fuel excise taxes, 2.187 for tobacco excise taxes, 2.132 for alcohol excise taxes and 1.080 for the VAT. Using pro-poor distributional weights does not change the relative social marginal cost of raising revenues through the excise taxes.

## INTRODUCTION

Excise taxes, commodity taxes, and import duties are the most important sources of tax revenue in most developing countries, represented 60.6 percent of tax revenues in developing countries in 1995-97 compared to 32.5 percent in OECD countries.<sup>1</sup> Among Southeast Asian countries, reliance on taxes on goods and services ranges from 13.0 percent of total tax revenue in Brunei to 82.3 percent in Cambodia. In Thailand, commodity taxes represent 59.1 percent of total tax revenues, with excise taxes contributing 25.6 percent of tax revenues. Given its heavy reliance on excise taxes, the equity and efficiency effects of excise taxes are important aspects of tax policy in Thailand. In this paper, we contribute to the analysis of excise tax policy in Thailand by computing the marginal cost of public funds (MCF) for the excise taxes on alcohol, tobacco, and fuel and for the value-added tax. We utilize the basic analytical framework for measuring the MCFs developed by Ahmad and Stern (1984) by using estimates of the own-and cross-price elasticities of demand for 10 categories of goods and services in Thailand. This allows us to capture the interdependence of the various commodity tax bases in Thailand in computing the MCFs. In addition, we extend the basic Ahmad and Stern framework by incorporating in the computation of

---

<sup>†</sup>The authors would like to thank Patanayut Santiyanont and Suwimon Fakthong for their efficient research assistance and especially to David Ryan for his advice on econometric issues. We are grateful to an anonymous referee for his/her comments. We are responsible for any errors or omissions. Major funding for this research project came from the Canadian International Development Agency (CIDA). Other funding was provided by the Human Resources and Social Development Program, Thailand Development Research Institute.

\* Senior Research Specialist at the Thailand Development Research Institute, Bangkok, Thailand. Email: worawan@tdri.or.th.

\*\*Professor at the Department of Economics and Fellow of the Institute of Public Economics, University of Alberta, Alberta, Canada. Email: bdahlby@ualberta.ca.

<sup>1</sup> Calculations based on data in Tanzi and Zee (2000, Table 2, p.304). See also Burgess and Stern (1993, Table 5, p.773) on developing countries' reliance on goods and services taxation.

the MCFs the non-tax distortions created by (a) environmental externalities, (b) public expenditure externalities, (c) addiction, (d) market power, and (e) smuggling. Our analysis, based on our benchmark parameter values, indicates that the MCFs are 0.532 for fuel excise taxes, 2.187 for tobacco excise taxes, 2.312 for alcohol excise taxes, and 1.080 for a VAT increase. We also use pro-poor distributional weights and data on the spending patterns of 90 household groups in Thailand to calculate distributionally-weighted MCFs, but this procedure does not change the ranking of the social marginal cost of the excise taxes. Finally, we show that a revenue-neutral marginal tax reform—reducing the excise tax rates on alcohol and tobacco by one percentage point and increasing the fuel excise tax—would result in a net efficiency gain equal to 1.72 Baht for every additional Baht of fuel tax revenue.

The paper is organized as follows. The next section outlines the basic theory of the MCF and how we incorporate the various non-tax distortions, such as externalities, market power, smuggling and addiction, in the formula for the MCF. Then we describe the parameters used in the calculations—tax rates, budget shares, elasticities of demand, and measures of the non-tax distortions. In the subsequent section, we present our calculations of the MCFs, including the contributions of the various non-tax distortions to the overall MCFs, and the potential net gain from a revenue neutral marginal tax reform. The penultimate section describes the computations of the distributionally-weighted MCFs. The final section contains our conclusions.

## THE THEORY OF THE MCF<sup>2</sup>

The marginal cost of public funds measures the loss incurred by society in raising additional tax revenues. It has emerged as one of the most important concepts in the field of public economics, playing a key role in the evaluation of tax reforms, public expenditure programs, and other public policies, ranging from tax enforcement to privatization.

### Tax Distortions

Taxes can distort the allocation of resources in an economy by altering taxpayers' consumption, savings, labor supply, and investment decisions. The MCF is a summary measure of the additional distortion in the allocation of resources that occurs when a government raises additional revenue. However, minimizing the efficiency losses is not the only criteria for evaluating tax measures because taxes that impose heavy burdens on low income individuals are also "costly" taxes. The MCF concept can be used to combine equity or distributional concerns with efficiency effects in a summary measure of the total cost to a society of raising tax revenue. In this paper we use the MCF concept to evaluate the main excise taxes imposed by the government of Thailand.

Our basic model follows the approach pioneered by Ahmad and Stern (1984). For general surveys of the methodology and issues in evaluating commodity tax reforms, see Ray (1997), Santoro (no date) and Dahlby (forthcoming, Ch. 3). Our main methodological contribution is the inclusion of non-tax distortions in the computation of the MCFs for excise taxes. Initially, to simplify the analysis, we will ignore distributional issues by assuming that the economy only consists of one individual whose well-being is represented by the indirect utility function,  $V(q, I)$ , where  $q$  is the

---

<sup>2</sup> This section is based on Dahlby (forthcoming, Chapters 2 and 3).



vector of consumer prices and  $I$  is lump-sum income. Later we show how to incorporate distributional concerns in the measurement of the social marginal cost of public funds (SMCF).

Total tax revenues  $R = \sum_{i=1}^n t_i x_i$  depend on the tax rates,  $t_i$ , imposed on the  $n$  commodities, denoted by the  $x_i$ s, that are consumed by the individual. A money measure of the harm imposed on the individual in raising an extra dollar of tax revenue by increasing tax rate  $t_i$  is defined by the expression:

$$MCF_{t_i} = - \frac{\frac{1}{\lambda(q, I)} \frac{dV}{dt_i}}{\frac{dR}{dt_i}} \quad (1)$$

where  $\lambda(q, I)$  is the individual's marginal utility of income. In defining the  $MCF_{t_i}$ , it is assumed that  $dR/dt_i$  is positive, i.e. that the government is operating on the upward-sloping section of its Laffer curve with respect to  $t_i$ .

If a tax increase is fully reflected in the consumer price of the product and does not affect the prices of other products— $dq_i/dt_i = 1$  and  $dq_j/dt_i = 0$ —and using Roy's theorem, the following expression for the  $MCF_{t_i}$  can be derived:<sup>3</sup>

$$MCF_{t_i} = \frac{x_i}{x_i + \sum_{j=1}^n t_j \frac{dx_j}{dq_i}} = \frac{b_i}{b_i + \sum_{j=1}^n \tau_j b_j \varepsilon_{ji}} \quad (2)$$

where  $\varepsilon_{ji}$  is the elasticity of demand for commodity  $j$  with respect to the price of commodity  $i$ ,  $b_j$  is the budget share of commodity  $j$ , and  $\tau_j = t_j/q_j$  is the ad valorem tax rate on commodity  $j$ . This expression for the MCF indicates the importance of the tax rates on other commodities in evaluating the MCF for any particular commodity tax. If commodity  $j$  is a substitute for commodity  $i$  and  $\varepsilon_{ji} > 0$ , then an increase in the tax on commodity  $i$  will boost the demand for commodity  $j$ . The additional tax revenue collected from the tax on commodity  $j$  is a measure of the welfare gain from the improvement in the allocation of resources in the  $j$ th commodity market arising from the increase in  $t_i$ , and this effect reduces the  $MCF_{t_i}$ . Conversely, if the commodity  $j$  is a complement for  $i$ , then raising the tax rate on commodity  $i$  will exacerbate the tax distortion in the allocation of resources in the  $j$ th commodity market by reducing the consumption of  $j$ . The resulting loss of revenue from the tax on  $j$  is a measure of the additional distortion caused by the tax increase on commodity  $i$ .

The theory of optimal commodity taxation emphasizes the interaction between the demands for the taxed commodity and leisure. In particular, the Corlett and Hague

<sup>3</sup> It further assumed that the taxes do not affect relative input prices. This is an admittedly strong assumption given that some fuel excise taxes are paid by businesses.

Rule for optimal commodity taxation states that higher taxes should be levied on the commodities that are more complementary with leisure in order to offset the distortion in the labour-leisure decision caused by our inability to tax leisure directly. We will consider the implications of the interaction between commodity taxes and leisure-labour supply decisions for the measurement of the MCFs for excise taxes in the section dealing with the estimation of the demand elasticities.

As Devarajan et al (2001) have stressed, it is very important to consider both tax and non-tax distortions in measuring the  $MCF_{t_i}$ . In the following sections, we will show how we can incorporate the welfare effects from non-tax distortions—environmental externalities, public expenditure externalities, imperfect competition, addiction, and tax evasion—in the measurement of the MCF.

### Environmental externalities

Suppose that household 1's consumption of commodity  $i$ ,  $x_i^1$ , directly affects the utility of household 2, such that  $U^2(x_i^1, x_j^2)$ . The marginal external benefit from household 1's consumption of commodity  $i$  is equal to  $d_{Ei} = (1/\lambda^2)(\partial U^2 / \partial x_i^1)$ . In the case of a harmful externality, such as second hand smoking,  $d_{Ei} < 0$ . The MCF from taxing commodity  $i$  (assuming a perfectly competitive market and no other tax or non-tax distortions) is:

$$MCF_{\tau_i} = \frac{x_i \cdot dt_i - d_{Ei} \Delta x_i}{\frac{\partial R}{\partial t_i} \cdot dt_i} = \frac{1 - \delta_{Ei} \varepsilon_{ii}}{1 + \tau_i \varepsilon_{ii}} \quad (3)$$

where  $\delta_{Ei} = d_{Ei} / q_i$  is the proportional marginal external benefit generated by  $x_i$ . If the activity generates a positive externality, then  $-\delta_{Ei} \varepsilon_{ii}$  is positive and the MCF is higher because taxing the commodity reduces the positive external benefit from the commodity. If the activity produces a harmful externality, then  $-\delta_{Ei} \varepsilon_{ii}$  is negative, and the MCF is lower, reflecting a social gain from reducing a harmful externality when the commodity is taxed. Finally, note that from the above equation, the optimal tax rate on commodity  $i$  is the Pigouvian tax  $\tau_i = -\delta_{Ei}$  if the government can levy lump-sum taxes and its MCF is one.

### Public expenditure externalities

In the previous section, we showed how a distortion caused by an environmental externality, such as second hand smoking, can be incorporated in the formula for the MCF. There is another type of externality—which we will call a public expenditure externality—that operates through the government's budget constraint. For example, an increase in cigarette consumption may drive up public expenditures on health care. Even in the absence of a “second-hand” smoke externality, smoking adversely affects non-smokers through the higher taxes that they have to pay as a result of higher public health care expenditures. The health care costs associated with smoking are often used to justify high taxes on tobacco products. Below, we show how these public expenditure effects can be incorporated in the formula for the MCF.

Suppose that the government provides a service,  $G$ , and the cost of providing this service is  $C(G, x)$  where  $\partial C/\partial G > 0$  is the marginal cost of providing the service and  $\partial C/\partial x$  is the increase in the cost of providing a given level of service (say health care) as a result of an increase in the consumption of a private good  $x$ . For simplicity, we will ignore the taxes that are levied on other goods (that might be substitutes or complements with  $x$ ), and therefore the public sector's budget constraint requires that  $tx = C(G, x)$ . Increasing the tax rate on  $x$  can increase the public sector's net revenues either directly by increasing total revenues or indirectly by reducing net expenditures. Consequently, the MCF for taxing  $x$  will be equal to:

$$MCF_t = \frac{x}{x + t \frac{dx}{dt} - \frac{\partial C}{\partial x} \frac{dx}{dt}} = \frac{1}{1 + (\tau - \delta_G)\epsilon} \quad (4)$$

where it is assumed that the supply of the taxed commodity is perfectly elastic so that  $dq/dt = 1$  and  $\delta_G = \partial C / q \partial G$  which is the change in the cost of public expenditures when individuals spend another dollar on  $x$ . When  $\delta_G > 0$  (e.g. tobacco products), we see that the public expenditure effect reduces the MCF when a higher tax rate reduces the demand for the commodities that are responsible for higher costs of providing a given level of public services. If government could impose lump-sum taxes, and the MCF was one, then the optimal tax rate on  $x$  would be  $\tau = \delta_G$ . In other words, the commodity would be taxed at a rate that reflects its public expenditure externality, just as in the case of the Pigouvian tax for a direct consumption externality.

### Addiction

Many individuals regret excessive consumption of some commodities, such as alcohol, tobacco and fatty foods. "For example, during 2000, 70 percent of current smokers expressed a desire to quit completely and 41 percent stopped smoking for at least one day in an attempt to quit, but only 4.7 percent successfully abstained for more than three months."<sup>4</sup> Individuals who are prone to excessive drinking or smoking are said to have self-control or addiction problems. In many countries, excise taxes on alcohol and tobacco are viewed favourably as "sin taxes" because higher prices may reduce the degree of excessive consumption. See Badenes-Plá and Jones (2003) for a survey of the economics literature on addiction and taxes, Gruber and Köszegi (2004) and Gruber and Mullainathan (2005) for recent empirical studies of the implications of addiction for efficiency and distributional effects of cigarette taxes, and the *Economist* (2006) for a discussion of public policies based on the "new paternalism".

We use a simple model developed by O'Donoghue and Rabin (2006) to illustrate the way in which the self-control distortion can be incorporated in the evaluation of a tax increase on these commodities. Suppose an individual consumes only two goods,  $x_1$  and  $x_2$ . The consumption of  $x_2$  provides constant marginal utility, normalized to equal one. The consumption of  $x_1$  provides the individual with a benefit  $V(x_1)$  and also a psychic cost  $C(x_1)$ , which could be interpreted as a cost that arises from a future health

<sup>4</sup> Bernheim and Rangel (2005, p.39).

problem. The individual make consumption decisions according to the following utility function:

$$U^* = V(x_1) - \Phi C(x_1) + x_2 \quad (5)$$

where  $\Phi$  is a positive parameter. If  $\Phi < 1$ , the individual is said to have a self-control problem because he does not take into account the full personal cost consuming  $x_1$ . The individual's budget constraint is  $q_1 x_1 + x_2 = I$ , where the price of  $x_2$  is set equal to one. The individual consumes  $x_1^*$  based on the first order condition,  $V_{x_1} = \Phi C_{x_1} + q_1$ .

However, the individual's long-run happiness is based on the utility function:

$$U^{**} = V(x_1) - C(x_1) + x_2 \quad (6)$$

which fully reflects the cost that the individual incurs when he consumes  $x_1$ . The individual with self control problems over-consumes  $x_1$  because the ideal consumption is based on  $V_{x_1} = C_{x_1} + q_1$

To evaluate the effects of a tax rate change, we will assume that the individual and society are concerned with the impact of the tax increase on the individual's long-run utility. (See Bernheim and Rangel (2005) on using the individual's long-term welfare in assessing policies.) The welfare effect of a tax increase is equal to:

$$\frac{dU^{**}}{dt_1} = (V_{x_1} - C_{x_1}) \frac{dx_1}{dq_1} + \frac{dx_2}{dq_1} = -x_1^* + (V_{x_1} - C_{x_1} - q_1) \frac{dx_1}{dq_1} \quad (7)$$

since, from the individual's budget constraint,  $dx_2/dq_1 = -x_1^* - q_1 dx_1/dq_1$ . Using the individual's first order condition, the following expression measures the harm caused by a tax increase:

$$-\frac{dU^{**}}{dt_1} = x_1^* \left[ 1 + \left( \frac{(1 - \Phi)C_{x_1}}{q_1} \right) \varepsilon_{11} \right] = x_1^* (1 - \delta_{A_1} \varepsilon_{11}) \quad (8)$$

where  $\varepsilon_{11} = (dx_1/dq_1)(q_1/x_1) < 0$  is the price elasticity of demand for  $x_1$ . The distortion caused by the individual's self-control problem is defined as:

$$\delta_{A_1} = (V_{x_1} - C_{x_1} - q_1)/q_1 = (\Phi - 1)C_{x_1}/q_1 \quad (9)$$

The  $\delta_{A_1}$  parameter reflects the distortion that arises because there is a wedge between marginal value of an additional unit of  $x$  to the individual and its true marginal cost. It can be interpreted as the *neglected* proportion of the additional cost incurred in spending an additional dollar on  $x_1$ . If the individual has a self-control problem and  $\Phi < 1$ ,  $\delta_{A_1}$  is negative, and this factor tends to reduce the social harm from a tax increase. Indeed, it is possible for a price increase to make the individual better off, at least as judged by his long-run utility function, if  $\delta_{A_1} \varepsilon_{11} > 1$  and in this case, the MCF would be a negative number. The formula for the marginal cost of public funds for the commodity tax is:

$$MCF_{t_1} = \frac{1 - \delta_{A_1} \varepsilon_{11}}{1 + \tau_1 \varepsilon_{11}} \quad (10)$$

assuming that there are no other distortions in the economy. If the government could raise revenue by imposing a lump-sum tax, such that its MCF was 1.00, then the optimal tax rate on the commodity would be  $\tau_i = -\delta_{A_i} = (1 - \Phi)(C_{x_i} / q_i)$ . The optimal sin tax rate would reflect the *neglected* proportion of the additional cost incurred in spending an additional dollar on  $x_i$ . See O'Donoghue, T. and M. Rabin (2006) for further discussion of optimal sin taxes.

Obviously, incorporating these self-control distortions into the calculation of the MCF is controversial, but we think that lack of self-control problems, especially with regard to tobacco products, reflects public opinion and policy-makers' views concerning the use of excise taxes. For this reason, we think that it is important to incorporate defective decision-making explicitly in the model so that it can be compared with the other distortions that affect the MCF. In this way, a better judgment can be made concerning the relative importance of self-control problems in the overall assessment of the appropriate level of excise taxation.

### Market power

Suppose an excise tax is levied on a monopolist's product. To keep the model as simple as possible, we will ignore all other tax and non-tax distortions in deriving an expression for the distortion due to monopoly power.

Let the after-tax profit of the monopolist be:

$$\Pi = (1 - \tau_\pi) \cdot [qx - C(x) - tx] \quad (11)$$

where  $\tau_\pi$  is the profit tax rate, and  $t$  is the per unit tax rate.<sup>5</sup> Differentiating after-tax profit with respect to the per unit tax rate, we obtain:

$$\begin{aligned} \frac{d\Pi}{dt} &= (1 - \tau_\pi) \left[ x \frac{dq}{dt} + q \frac{dx}{dq} \frac{dq}{dt} - MC \frac{dx}{dq} \frac{dq}{dt} - x - t \frac{dx}{dq} \frac{dq}{dt} \right] \\ &= (1 - \tau_\pi) \left[ x \frac{dq}{dt} - x + (q - MC - t) \frac{dx}{dq} \frac{dq}{dt} \right] \end{aligned} \quad (12)$$

where MC is the marginal cost of production. Ignoring distributional effects, the indirect utility function for a representative individual is  $V(q, \Pi)$ . The social welfare cost of an increase in the tax rate on the monopolist's product is:

<sup>5</sup> In general, it is important to distinguish between ad valorem taxes and per unit taxes in evaluating the MCF from taxing a monopolist's product because as is well known a monopolist's price response differs for these two types of taxes. See Dahlby (forthcoming, Chapter 3). For our purposes, because the Thai Tobacco Company is a state-owned monopoly, this distinction can be ignored as will be shown below.

$$\begin{aligned}
-\frac{1}{\lambda} \frac{dV}{dt} &= -\frac{1}{\lambda} \left( \frac{dV}{dq} \frac{dq}{dt} + \frac{dV}{d\Pi} \frac{d\Pi}{dt} \right) \\
&= x \frac{dq}{dt} - (1 - \tau_\pi) x \left[ \frac{dq}{dt} - 1 + \delta_M \varepsilon \frac{dq}{dt} \right] \\
&= x \left[ (1 - \tau_\pi) + \tau_\pi \frac{dq}{dt} - (1 - \tau_\pi) \delta_M \varepsilon \frac{dq}{dt} \right]
\end{aligned} \tag{13}$$

where  $\delta_M = (q - MC - t)/q$  is a measure of the distortion in the market caused by imperfectly competitive behaviour,  $\varepsilon$  is the elasticity of demand for the monopolist's product,  $\lambda = dV/d\Pi$  is the marginal utility of income, and  $dV/dq = -\lambda x$  by Roy's Theorem. The first term in square brackets represents the net increase in taxes paid by the private sector, given that excise taxes are deductible in computing the firm's profit tax liability. The second term represents the additional profit tax that is paid as a result of the increase in the price of the monopolist's good. The third term is the reduction in after-tax profits sustained by the monopolist as a result of the decline in output caused by the tax.

Total tax revenue is equal to  $R = tx + \tau_\pi \Pi / (1 - \tau_\pi)$ . Differentiating with respect to  $t$  we obtain:

$$\begin{aligned}
\frac{dR}{dt} &= x \left( 1 + \tau \varepsilon \frac{dq}{dt} \right) + \frac{\tau_\pi}{1 - \tau_\pi} \left[ (1 - \tau_\pi) \left[ x \frac{dq}{dt} - x + (q - MC - t) \frac{dx}{dq} \frac{dq}{dt} \right] \right] \\
&= x \left[ (1 - \tau_\pi) + \tau_\pi \frac{dq}{dt} + (\tau + \tau_\pi \delta_M) \varepsilon \frac{dq}{dt} \right]
\end{aligned} \tag{14}$$

The first term in square brackets represents the net increase in tax revenues, for a given level of output by the monopolist, the second term is the increase in profit tax revenues from the induced increase in the price of the monopolist's product, and the third term is reduction in total tax revenues from the reduction in the output produced by the monopolist. Note that the government sustains a reduction in profit taxes,  $\tau_\pi \delta_M$  as a result of the reduction in the monopolist's profit.

From the above equations, we can obtain the following expression for the marginal cost of public funds from an excise tax levied on a monopolist's product:

$$MCF_t = \frac{(1 - \tau_\pi) + \tau_\pi \frac{dq}{dt} - (1 - \tau_\pi) \delta_M \varepsilon \frac{dq}{dt}}{(1 - \tau_\pi) + \tau_\pi \frac{dq}{dt} + (\tau + \tau_\pi \delta_M) \varepsilon \frac{dq}{dt}} \tag{15}$$

An interesting special case is where  $\tau_\pi = 1$ , which corresponds to a situation where the monopoly is owned by the government and all of the profits and taxes on the product are received by the public treasury. This case is particularly relevant for Thailand because of the Thai Tobacco Company, a state-owned enterprise, has a

monopoly on the sale and distribution of domestically produced cigarettes in Thailand. In this situation, the MCF is equal to:

$$MCF_t(\tau_\pi = 1) = \frac{1}{1 + (\tau + \delta_M)\varepsilon} \quad (16)$$

which is independent of the degree of tax shifting. In this case, the total tax rate on the product is effectively  $\tau + \delta_M$ .

### Smuggling

Norton (1988) has developed an economic model of smuggling and Usher (1986) and Ray (1997, 380-384) have incorporated tax evasion into the calculation of the MCF. Below, we outline a simple model that incorporates smuggling into the MCF for an excise tax. Suppose the elasticity of the supply of the smuggled commodity is  $\eta^s > 0$ . The price of the smuggled commodity will reflect its production cost plus the smuggling costs that are incurred by the smugglers,  $q^s = p + c^s$ . It will be assumed that these smuggling costs are less than the per unit excise tax imposed on the legitimate goods. Consumers are willing to buy smuggled goods as long as the price of a smuggled good plus the search costs,  $f$ , are less than the price of a legitimate good cigarette,  $q^s = q - f$ . Assuming the excise tax increases are fully reflected in the price of the legitimate good, this implies that  $dq/dt = dq^s/dt = 1$  if search costs are relatively constant. The demand for the legitimate goods that are fully taxed is the difference between the total demand and the demand for smuggled goods or  $x^l = x^T(q) - x^s(q^s)$  where  $x^T$  is the total number of cigarettes consumed. The government's tax revenue (ignoring all other taxes) is  $R = tx^l$ . The marginal cost of public funds from taxing cigarettes can then be expressed as:

$$MCF = \frac{x^l \frac{dq}{dt} + x^s \frac{dq^s}{dt}}{x^l + t \left( \frac{dx^l}{dq} \frac{dq}{dt} \right)} = \frac{1}{(1 - v)(1 + \tau \varepsilon^l)} \quad (17)$$

where  $v = x^s/x^T$  is the share of the smuggled goods in total consumption and  $\varepsilon^l$  is the elasticity of demand for legitimate goods. Smuggling increases the MCF because the tax base is smaller and the tax base is more tax sensitive because smuggling gives individuals the opportunity to switch to a non-taxed alternative. The elasticity of demand for legitimate goods is related to the elasticity of demand for total consumption and the smuggling supply elasticity as follows:

$$(1 - v)\varepsilon^l = \varepsilon^T - v(q/q^s)\eta^s \text{ where } (q/q^s) = (p+c^s+f)/(p+c^s) < (1 - \tau)^{-1} \quad (18)$$

When the tax rate is raised, the volume of taxed goods decreases because total consumption falls and the volume of smuggled goods increases. For example, if 20 percent of the cigarettes are smuggled and if the elasticity of total demand for cigarettes is -0.40, the elasticity of demand for legitimate cigarettes could be as high as -0.813 if the elasticity of the supply of smuggled cigarettes is 0.50 and as much as -1.44 if the elasticity of the supply of smuggled cigarettes is 1.50. Therefore, ignoring the impact of smuggling by using the elasticity of total demand for cigarettes in the

calculation of the MCF, rather than the elasticity of demand for legitimate cigarettes, may significantly under-estimate the MCF for cigarette taxes.

### Distributional considerations

To this point, we have focused on the efficiency aspects of the marginal cost of public funds. However, all societies are concerned about the distributional impact of their tax system, and a tax increase that is borne mainly by the poor can be viewed as having a high social cost. Indeed, governments use distortionary taxes because of their concern for distributional equity, i.e. in the absence of these concerns, governments could simply rely on lump-sum taxes. Consequently, we need to incorporate distributional concerns in the measurement of the social marginal cost of public funds to fully evaluate tax and expenditure reforms.

To incorporate distributional considerations, we follow the procedure developed by Feldstein (1972) and implemented by Ahmad and Stern (1984) in the analysis of commodity tax reform in India.<sup>6</sup> Suppose there are  $H$  households in the economy. Household  $h$  purchases  $x_i^h$  units of commodity  $i$  at the price  $q_i$ . The household's

budget constraint is  $\sum_{i=1}^n q_i x_i^h = I^h$  where  $I^h$  is the household's lump-sum income. The

level of utility or well-being that household  $h$  can obtain, given consumer and producer prices, its lump-sum income, its ownership of inputs, and its preferences, is indicated by its indirect utility function,  $V^h = V^h(q, I^h, G)$  where  $q$  is the vector of consumer prices,  $p$  is the vector of producer prices, and  $G$  is a vector of publicly-provided goods and services. By Roy's theorem,  $\partial V^h / \partial q_i = -\lambda^h x_i^h < 0$  where  $\lambda^h(q, I^h, G)$  is the household's marginal utility of income and  $x_i^h(q, I^h, G)$  is the household's ordinary demand function for commodity  $i$ . The total demand for commodity  $i$  is

$$x_i = \sum_{h=1}^H x_i^h.$$

Suppose that tax and expenditure decisions are based on the social welfare function,  $S = S(V^1, V^2, \dots, V^H)$ , which reflects the trade off that a society is willing to make when a policy makes some households better off and other household worse off. The distributional weight,  $\beta^h = (\partial S / \partial V^h) \lambda^h$ , represents the value that the society places on an extra dollar of lump-sum income received by household  $h$ . It will be assumed that the social welfare function reflects a "pro-poor" preference such that  $\beta^h$  is higher when  $V^h$  is lower.

The social valuation of the households' welfare loss from an increase in the price of commodity  $i$  is:

$$\frac{\partial S}{\partial q_i} = \sum_{h=1}^H \frac{\partial S}{\partial V^h} \cdot \frac{\partial V^h}{\partial q_i} = - \sum_{h=1}^H \beta^h \cdot x_i^h = - \left( \sum_{h=1}^H \beta^h \cdot s_i^h \right) x_i = - \omega_i x_i \quad (19)$$

<sup>6</sup> For a recent application of this methodology to commodity tax reform in Italy, see Liberati (2001).



where  $s_i^h = x_i^h / x_i$  is household  $h$ 's share of the total consumption of commodity  $i$ . The  $\omega_i$  parameter is known as the distributional characteristic commodity  $i$ , and it measures the social harm caused by increasing total household expenditure on  $x_i$  by a dollar. Note that  $\omega_i$  will tend to be larger when  $\beta^h$  and  $s_i^h$  are positively correlated. This means that  $\omega_i$  will be high for commodities that are consumed mainly by the poor.

The social marginal cost of public funds from taxing commodity  $i$  can be defined as:

$$SMCF_{t_i} = \frac{-\frac{dS}{dt_i}}{\frac{dR}{dt_i}} = \omega_i \cdot MCF_{t_i} \quad (20)$$

To compute the  $\omega_i$ s, we need the  $\beta^h$ s which reflect a society's, or perhaps more accurately its policy-makers', willingness to trade-off gains and losses sustained by different segments of society. The distributional weights are based on value judgments, and economists have no special insights into what constitutes the appropriate set of distributional weights. Economists, however, have tried to help policy-makers apply a consistent set of distributional weights. One approach is to use an explicit functional form for the relative distributional weights such as:

$$\frac{\beta^h}{\beta^r} = \left( \frac{Y^h}{Y^r} \right)^{-\xi} \quad (21)$$

where  $Y^r$  is the income of a reference household (such as a household with the average income) and  $\xi \geq 0$  is a parameter that measures the society's aversion to inequality. A standard normalization is to set  $\beta^r = 1$ . If  $\xi = 0$ ,  $\beta^h = 1$  for all  $h$ , and no consideration is given to distributional concerns. On the other hand, if  $Y^h = 0.5 Y^r$ , then  $\beta^h = 1.414$  if  $\xi = 0.5$  and  $\beta^h = 2$  if  $\xi = 1$ . We use this approach to compute the SMCFs of the alcohol, tobacco, and fuel excise taxes.

### The SMCF

In the absence of a general equilibrium model to trace the effects of the excise taxes on the prices of all commodities, we have assumed that the excise taxes on alcoholic beverages, tobacco, and fuel are fully reflected in their product prices and that the prices of other commodities are not affected. Therefore,  $dq_i/dt_i = 1$  and  $dq_j/dt_i = 0$  for  $i \neq j$ . Combining the tax and non-tax distortions discussed in the previous section with the distributional characteristic of the taxed good, we have the following formula for the social marginal cost of funds for an excise tax:

$$SMCF_{t_i} = \omega_i \cdot \frac{b_i - \sum_{j=1}^n b_j (\delta_{E_j} + \alpha_j \delta_{A_j} + (1 - \tau_{\pi_j}) \delta_{M_j}) \epsilon_{ji}^T}{b_i (1 - v_i) + \sum_{j=1}^n b_j (1 - v_j) (\tau_j + \tau_{\pi_j} \delta_{M_j}) \epsilon_{ji}^l - \sum_{j=1}^n b_j \delta_{G_j} \epsilon_{ji}^T} \quad (22)$$

Note that the components of the MCF that reflect the distortions are multiplied by the  $\varepsilon_{ji}^T$ s, which reflect the change in total demands for goods, while the tax revenue changes (the second set of terms in the denominator) are multiplied by the elasticities of demand for legitimate commodities, the  $\varepsilon_{ji}^L$ s.

## PARAMETER VALUES

In this section, we describe how the various parameters used in the calculations were chosen.

### Tax rates and budget shares

The tax rates and budget shares for the 10 commodity groups that were included in the analysis are shown in Table 1. The data used for calculating average tax rates are from the Ministry of Finance and National Economic and Social Development Board (NESDB). The statutory value-added tax was 7.0 percent in 2002, but the average tax rates are around 3.5 percent for most commodities except for food and clothing because some items and small firms are exempt from VAT. The average tax rates for alcoholic beverages and tobacco are 39.3 and 58.7 percent. Note that the tax rate for tobacco does not include the profit earned by the Thai Tobacco Monopoly (TTM), the state-owned company that has a monopoly in the production of domestic cigarettes. The average tax rate for fuel was 53.6 percent. An appendix describing the computations of the tax rates is available from the authors upon request. The budget shares were calculated from the aggregate consumption data from the NESDB. The budget share of alcohol was 4.2 percent, tobacco was 1.7 percent, and electricity and fuels was 2.4 percent of aggregate consumption spending in 2002.

**TABLE 1: TAX RATES AND BUDGET SHARES FOR COMMODITIES IN THAILAND**

Commodity	Tax Rate, $\tau_i$	Budget Share, $b_i$
1 Food	0.016	0.234
2 Alcohol	0.393	0.042
3 Tobacco	0.587	0.017
4 Clothing	0.0180	0.131
5 Health	0.035	0.064
6 Electricity and Fuels	0.536	0.024
7 Telecommunications	0.035	0.017
8 Housing and Water	0.036	0.126
9 Entertainment	0.037	0.042
10 Other Goods and Services	0.032	0.302

**Demand elasticities**

The estimated demand elasticities are shown in the matrix below. (The own-price elasticities are along the diagonal.)

-0.1033	-0.0959	0.0818	0.1940	-0.0262	-0.0730	0.0545	-0.6860	-0.0486	0.0649
0.7103	-0.8429	-0.0125	-0.2744	0.4372	0.5244	-0.9369	0.1127	0.8354	-0.8950
-0.0348	-0.5159	-0.7992	-0.0835	0.1114	-0.0185	-0.1424	0.2369	0.1969	-0.3799
-0.5169	-0.3983	0.0281	-0.8380	0.1388	-1.1741	0.5797	0.2243	-0.6041	0.4520
0.0206	1.0223	-0.6111	1.8406	-1.5239	1.2575	-1.1766	1.8135	1.4716	-1.6749
-0.2923	-0.3043	0.2181	0.6647	-0.0927	-0.1833	0.2832	-0.5222	-0.1347	-0.0513
-0.2673	0.2926	0.1845	-1.4932	0.9452	1.2515	-0.2462	-0.2629	0.6606	-2.5485
0.1650	0.1295	-0.0802	0.7296	-0.5065	-0.0600	-0.2327	-0.0228	0.3480	-0.3652
0.0851	-0.1283	0.1458	0.0926	-0.4631	-0.3089	0.1216	-0.1335	-0.5734	0.1231
-0.9002	0.0565	0.0221	-1.1178	0.3235	0.2813	0.1250	-0.2827	-0.3962	-0.4540

The price elasticities of demand for the ten commodities were estimated, using the Almost Ideal Demand System (AIDS) developed by Deaton and Muellbauer (1980), based on data on consumption expenditures from 1983 to 2002 in the Thailand National Income Account. The observations for 1998-99 were omitted because of the non-normal consumption shares in that year due to the economic crisis that began in the fall of 1997. (An appendix describing the demand estimation is available from the authors upon request.)

Our estimated own-price elasticity for alcoholic beverages is quite high, -0.8429, compared to the -0.54 estimate obtained by Sarntisart (2003). However, it is less elastic than the values in the TDRI (2005) study where the price elasticities for color liquor, white liquor, imported liquor, beer and wine were -1.56, -2.73, -0.61, -2.68 and -0.60. Part of the reason for the differences in these estimates may be the fact that Sarntisart used household consumption data that included both tax and untaxed consumption while TDRI used the data from taxed consumption provided by the Excise Department. See Leung and Phelps (1993) and Badenes-Plá and Jones (2003, Table 3, p.140) for a summary of empirical estimates of the price elasticity of alcohol consumption in the US and other countries. These studies generally indicate that the demand for beer is relatively price insensitive (around -0.3) and the demand for spirits is price elastic (around -1.5) with the demand for wine having an intermediate price elasticity (around -1.00). Our estimate of the elasticity of the total demand for taxed alcohol falls within the usual range of estimates from other countries.

Our elasticity estimates indicate that alcohol is a gross complement for tobacco (-0.5159) and for electricity and fuel (-0.3043) while tobacco is a very weak complement for alcohol (-0.0125), but a substitute for electricity and fuel (0.2181).<sup>7</sup> Therefore an alcohol tax rate increase will reduce the demand for both tobacco and fuel, and therefore some of the increase in the alcohol tax revenues from an alcohol

<sup>7</sup> A recent study by Decker and Schwartz (2000) using household level data from the U.S. indicated that the demand for cigarettes declines when alcohol prices increase while the demand for alcohol increases when the price of cigarettes increase. An early study using aggregate US data by Goel and Morey (1995) had indicated that alcohol and tobacco were substitutes, while a study using UK data by Jones (1989) indicated that tobacco was a complement for alcohol. Gruber, Sen and Stabile (2002) based on Canadian data found that higher cigarette prices reduced alcohol consumption.

tax rate increase will be offset by declines in tobacco and fuel excise tax revenues. (The net effect on other commodity tax revenues is indeterminate, but likely to be relatively small.) This negative effect on tobacco and fuel excise tax revenues will tend to raise the MCF for alcohol excise taxes. However, the reductions in the consumption of tobacco and fuel would also reduce the MCF for alcohol excise taxes if the net distortion for these commodities, captured by the  $\delta_{E_j} + \delta_{A_j} + (1 - \tau_{\pi_j})\delta_{M_j}$  terms in the MCF formula, are negative i.e. marginal social cost exceeds marginal social benefit.

The price elasticity for tobacco products is -0.7992, which is close to the -0.83 value obtained in a study by Pattamasiriwat (1989), but substantially higher than the -0.39 price elasticity found by Sarntisart (2003) based on household tobacco consumption data.<sup>8</sup> The differences may be due to smuggled or non-taxed cigarettes which the study by Sarntisart indicated are fairly prevalent in Thailand. (He found that about 46 percent of imported cigarette package littering in five provinces across Thailand were untaxed cigarette.) In other words, the price elasticity using data from the National Income Account is higher than for total household cigarette consumption, where taxed and untaxed cigarettes are included. Galbraith and Kaiserman (1997) found the same relationship in Canada where the price elasticity for taxed cigarettes was higher (-1.01) than that for total (taxed and untaxed) cigarette consumption (-0.4). Another study from Canada by Gruber, Sen and Stabile (2002) also found that the demand for taxed cigarettes was higher than the total demand (-0.70 versus -0.45). Our cross-price elasticities of demand imply that an increase in tobacco taxes will increase excise tax revenues from fuel, but increase distortion in the allocation of resources if there is a negative distortion in the market for fuel.

The demand for fuel and electricity consumption is quite price inelastic (-0.1833). Econometric studies of price elasticity of gasoline in the U.S. reviewed by Parry and Smart fall in the -0.3 to -0.90 range<sup>9</sup>, and therefore our estimate of the own-price elasticity is considerably lower than that found in other countries. However, Wade (2003) showed that the short-run price elasticities of distillate fuel for residential and commercial uses were -0.15 and -0.13. In his review, he showed that short-run price elasticity of fuel oil for residential use in the U.S. was -0.10 to -0.59 and for commercial use was -0.07 to -0.19. Our econometric estimates indicate that electricity and fuel is a substitute for alcohol (0.5244) and a weak complement for cigarettes (-0.0185). Consequently, a fuel tax increase would tend to increase alcohol excise tax revenues and improve the allocation of resources if the net non-tax distortion in the alcohol market is positive.

Our demand estimation is based on the assumption that total consumer expenditure is exogenously determined. In particular, it assumes that variations in the prices of commodities do not affect labour supply decisions. Most of the previous studies of commodity tax reform such as Ahmad and Stern (1984) and Decoster and Schokkaert (1990) have either adopted this assumption or assumed separability between leisure and all other goods in consumers' utility functions. These assumptions imply that in the absence of non-tax distortions the optimal commodity

<sup>8</sup> See N. Badenes-Plá and Jones (2003, Table 2, p.139) for a summary of empirical estimates of the elasticity of cigarette consumption which are in the -0.40 to -0.60 range.

<sup>9</sup> See Parry and Smart (2005, p. 1283).

tax rate is a uniform tax rate because all good are equally “substitutable” with leisure, the non-taxed good.

Given the importance that the theoretical literature on optimal taxation has attached to the cross-price elasticities between leisure and commodities, it is important to briefly review the few papers have examined the empirical significance of the separability assumption for computing MCFs for commodity taxes. Madden (1995, p. 497), noting that several econometric studies of consumer demands and labour supplies reject the separability assumption, estimated models with and without the separability assumption, based on data for Ireland 1958-1988, and concluded that the MCF “rankings do not appear to be very sensitive to assumptions regarding separability between goods and leisure”. In particular, he found that the MCFs for alcohol, tobacco, and fuels were 1.664, 1.397, and 1.193, respectively, without imposing separability and 2.304, 1.504, and 1.418 when separability was imposed.<sup>10</sup> Although Madden’s estimates of the MCFs were higher when separability between leisure and commodities was imposed in estimating the demand elasticities, the rankings of the MCFs for the three commodities subject to high levels of excise taxation did not change. In his computations of the efficiency effects of excise taxes in the U.K., Parry (2003) assumed that petrol and alcoholic beverages were substitutes for leisure and that cigarettes were a complement. However, the implied cross-price elasticities between leisure and the price of these commodities were very low and did not have a material effect on Parry’s measures of the marginal excess burdens imposed by the excise taxes.<sup>11</sup>

In marked contrast with the above studies, West and Williams (2006) found that including the cross-price effect between labour supply and the price of gasoline had a significant effect on the magnitude of the MCF for the excise tax on gasoline in the United States. They estimated a model based on individual household’s expenditures gasoline and all other goods and their labour income, and found that higher gasoline prices increased labour income (reduced the demand for leisure). This reduced the MCF from taxing gasoline and increased the optimal gasoline tax rate. However, only one of the three cross-price elasticity between labour income and the price of gasoline that they estimated was significantly different from zero (males in households with two adults) and that point elasticity was very low 0.013.

The West and Williams results are somewhat surprising, and the importance of the cross-price effects between excise taxes and labour supplies need to be investigated more completely. Given our current and very limited knowledge about the importance of these effects, we have proceeded by adopting the conventional assumption that these effects do not have a material effect on the rankings of the MCFs for excise taxes.

### **Environmental externalities**

In spite of a significant body of research, there is a great deal of uncertainty regarding the appropriate values to use for the  $\delta_E$  parameters for developed countries, such as the United States or the United Kingdom. There is even greater uncertainty for a developing country, such as Thailand, where much less empirical research has been

---

<sup>10</sup> Madden calculated the marginal revenue cost of increasing welfare, which is the inverse of the MCF.

<sup>11</sup> See Dahlby (forthcoming, Chapter 3).

done on the environmental impacts of alcohol, tobacco, and fuels and where economic, social, and environmental conditions may be substantially different than in the developed countries. Nonetheless, we have had to make some choices regarding these parameters, which are shown in Table 2. A detailed description of the benchmark parameter values is given in the following sections of this paper.<sup>12</sup>

---

<sup>12</sup> Parry (2003) has provided an extensive review of the empirical literature on the externalities generated by the consumption of gasoline, alcohol, and cigarettes in the United States and the United Kingdom. While there is still a great deal of uncertainty concerning the magnitudes of these parameters, Parry's choices for his base case estimates seem reasonable, but their applicability to Thailand is unknown. Based on his review of the literature, Parry concluded that tobacco products impose the largest harmful externalities, representing 28.3 percent of the consumer price of the product, followed by petrol at 17.8 percent, and alcohol at 11 percent of the product price. It should be noted that Parry treated all externalities as direct consumption externalities even though his discussion and the literature indicate that these externalities, especially for smoking and alcohol consumption, take the form of higher public expenditures on health care, and in our framework would be included in the  $\delta_G$  parameters.

**TABLE 2: PARAMETER VALUES FOR NON-TAX DISTORTIONS**

	Low Case	Benchmark Case	High Case
<b>Environmental Externality, <math>\delta_E</math></b>			
<i>Alcohol</i>	-0.007	-0.014	-0.05
<i>Cigarettes</i>	0	-0.025	-0.05
<i>Fuel</i>	-0.05	-0.10	-0.38
<b>Public Expenditure Externality, <math>\delta_G</math></b>			
<i>Alcohol</i>	0.001	0.002	0.008
<i>Cigarettes</i>	0.004	0.05	0.30
<i>Fuel</i>	0.09	0.18	0.27
<b>Addiction, <math>\delta_A</math> and <math>\alpha</math></b>			
<i>Alcohol</i>	-0.03, 0.017	-0.06, 0.052	-0.12, 0.071
<i>Cigarettes</i>	-0.8, 0.18	-1.65, 0.18	-3.3, 0.18
<i>Fuel</i>	0, 0	0, 0	0, 0
<b>Market Power, <math>\delta_M</math></b>			
<i>Alcohol</i>	0.065	0.13,	0.26
<i>Cigarettes</i>	0.10	0.20	0.30
<i>Fuel</i>	0	0	0
<i>Telecom</i>	0.10	0.25	0.55
<b>Net Non-Tax Distortion: <math>\delta_E - \delta_G + \alpha\delta_A + (1 - \tau_\pi)\delta_M</math></b>			
<i>Alcohol</i>	0.037	0.072	0.115
<i>Cigarettes</i>	-0.148	-0.372	-0.944
<i>Fuel</i>	-0.140	-0.280	-0.65
<i>Telecom</i>	0.070	0.175	0.385
<b>Smuggling, <math>\varepsilon^T</math> and <math>v</math></b>			
<i>Alcohol</i>	-0.54, 0.080	-0.54, 0.160	-0.54, 0.240
<i>Cigarettes</i>	-0.40, 0.023	-0.40, 0.155	-0.40, 0.300
<i>Fuel</i>	Na	na	na

Our estimates for the “environmental” externalities from alcohol are based on Smith (2005)’s recent survey of alcohol excise taxes because he decomposed these externalities in a way that is consistent with our framework.<sup>13</sup> Smith estimated that the total externality cost of alcohol in the U.K. is 17 percent of the pre-tax price. Based on his breakdown of the social costs of alcohol, we have decomposed his total externality into an 8.2 percent private sector “environmental” externality (losses sustained by employers etc.), a 1.31 percent public expenditure externality (health

<sup>13</sup> For further discussion of the externalities caused by alcohol consumption and tax policies to deal with these issues, see Pogue and Sgontz (1989), Grossman et al. (1993), Irvine and Sims (1993), Kenkel (1996), Cook and Moore (2002), and Chaloupka, Grossman, and Saffer (2002) and Grossman (2004).

costs, crime, and social responses) and 7.3 percent “internality” from unemployment and pre-mature death. (The latter is included in the  $\delta_A$  parameter for alcohol to be discussed in Section 3.6.) The  $\delta_E$  parameter for the benchmark case was calculated as  $-0.082 \cdot (1 - 0.393) \cdot 0.27 = -0.014$ . The 0.393 is the tax rate on alcohol in Thailand. We multiply by  $(1 - 0.393)$  to express the externality as a percentage of the tax inclusive price. We then multiply by the 0.27 which is the ratio of the purchasing power parity Thai GDP per capita to the U.K GDP per capita.<sup>14</sup> The High Case is the benchmark case without the adjustment for the relative GDPs in Thailand and the U.K. The Low Case is 50 percent of the benchmark case.

The environmental externality from tobacco is mainly second-hand smoke, and we do not know of any estimates for this type of externality. As noted in the literature, much of the second-hand smoke problem occurs within the family, and therefore it is debatable whether this is an “externality”. The incidence of second-hand smoke in Thailand has also been reduced with non-smoking in public transit, schools and public offices, but smoking is still permitted in bars and non air-conditioned restaurants in Thailand. Overall, we think that the second-hand smoke externality is likely to be small (not many people offer to pay smokers to butt out their cigarettes), but obviously this is controversial and based on a value judgment that we admit is difficult to defend.

Newbery’s (2005) estimate of the environmental cost is 14 pence per litre for gasoline in UK, excluding road costs which we treat as a public expenditure externality, and including 3.2 pence per litre for accidents. Our benchmark value for fuel environmental externality is  $-(0.14\text{£/litre})(67.8\text{B/£})(0.27)(25\text{B/litre}) = -0.10$  using the relative Thai to UK GDP per capita to is 27 percent of the U.K GDP per capita. For the High Case, we do not adjust for differences in Thai to UK real GDP per capita  $-(0.14\text{£/litre})(67.8\text{B/£})/(25\text{B/litre}) = -0.38$ . The Low Case is 50 percent of the Benchmark case.

### Public expenditure externalities

As is widely recognized, alcohol, tobacco and fuel consumption may directly or indirectly drive up public expenditures, forcing taxpayers to pay higher taxes to finance them or crowding out other valuable public services. This distortion operates through the government’s budget constraint, and therefore it has a distinct effect on the marginal cost of public funds, even though most studies do not distinguish between environmental externalities and public expenditure externalities.

The public expenditure externality for alcohol is based on an estimate of 1.3 percent of the pre-tax price in the U.K by Smith (2005). The distortion parameter was calculated as  $0.013 \cdot (1 - 0.393) \cdot 0.27 = 0.002$  where, as before, we multiply by  $(1 - 0.393)$  to express the externality as a percentage of the tax inclusive price. We then multiply by the 0.27, which is the ratio of the purchasing power parity Thai GDP per capita to the U.K GDP per capita. The High Case is the Benchmark Case without the adjustment for the relative GDPs in Thailand and the U.K. The Low Case is 50 percent of the benchmark case.

<sup>14</sup> This benefit transfer technique (the value transfer method) is used to convert the study site values (U.K in this case) to policy site values (Thailand in this case). The conversion using real per capita GDP is widely applied in environmental assessment in Thailand. See Rosenberger and Loomis (2003) for more details of the technique.



The benchmark value for the impact of smoking on health care costs uses the estimates from Manning et al. (1989) of \$US 0.25 per package (figures updated to 2003) See Cnossen (2005, p.37). This value was multiplied by 0.20 to reflect the relative GDP in Thailand and divided by 1.08, the price of a package of cigarettes in Thailand. The resulting estimate of the  $\delta_G$  parameter is  $(0.25)(0.20)/(1.08) = 0.046$ , rounded to 0.05. The High Case was obtained using the position expressed by the Director-General for WHO, Dr. Lee Jong-wook, that 15 percent of all health care costs in high income countries are due to smoking. Public health care costs are two-thirds of total health care costs in Thailand. Total health care costs in 2002 were 333,798 million Baht and total value of cigarette consumption was 55,832 million Baht. Therefore the High Case parameter value was calculated as  $(0.32)(0.15)(333,798)/(45,219) = 0.29$ , rounded to 0.30. The Low Case parameter value was based on the Sarntisart (2003, p. 43) estimate that the direct health care costs of tobacco were 249 million Baht in 2003. This would imply that the  $\delta_G$  parameter would be  $(249)/(55,832) = 0.004$ .

Newbery's (2005) estimate of road costs are 25.2 pence/litre in the U.K. The benchmark value for fuel public expenditure externality is  $(0.252\text{£/litre})(67.8\text{Baht/£}) = 0.18$ . The High Case is 50 percent higher and the Low Case is 50 percent lower than the Benchmark Case.

### Addiction

As noted in the introduction, excise taxes are often viewed as "sin taxes", levied in order to discourage the consumption of products that are "bad for people". In Section 2.3, we used the O'Donoghue and Rabin (2006) model to formalize the view that some individuals engage in excessive consumption of alcohol and tobacco because of defective decision-making. Obviously, the choice of the parameters is difficult in the absence of empirical research that might shed light on the degree of excessive consumption. Some progress in this direction has been made with the study by Gruber and Mullainathan (2005) which suggested that cigarette taxes in the U.S. and Canada might make some individuals better off by inducing them to quit smoking, or at least reduce their consumption of cigarettes. More research on this topic is obviously needed before anyone can feel fully comfortable in incorporating addiction in the MCF calculations. However, strong views about addiction dominate public views about the importance of excise taxes on alcohol and tobacco. We hope that our formalization of these views will help to assess their importance relative to the other factors, such as externalities, market power, and smuggling, which also influence public policy regarding excise taxes.

The calculation of the addiction parameter was based on Smith's estimate that the income loss from unemployment and premature death in the U.K. was 7.3 percent of the pre-tax price of alcohol. The value of  $C_x/q_x$  was calculated as  $(0.073 \cdot (1 - 0.373) \cdot 0.27) / (0.05) = 0.24$ . (The division by 0.05 represents the calculation of the present value of the annual stream of lost income at a five percent discount rate.) Gruber and Köszegi (2004, Table 2, page 1977) used values of  $\Phi = 0.60$  to  $\Phi = 0.9$  to reflect hyperbolic discounting of future costs and benefits by individuals with addiction problems. We use the mid-range value of 0.75. This implies that our benchmark parameter value for  $\delta_A$  for alcohol is  $(0.75 - 1)0.24 = -0.06$ . The Low Case is 50% of the benchmark case and the High Case is twice the benchmark case. The proportion of the population addicted to alcohol,  $\alpha$ , is the 3.34 percent of the

population who reportedly drink every day plus 50 percent of the 3.79 percent who drink 3 to 4 times per week.<sup>15</sup> Thus the Benchmark figure for  $\alpha$  is  $3.34 + (0.5)3.79 = 5.2$  percent. The High Case figure is  $3.34 + 3.79 = 7.1$  percent. The Low Case figure is half the percentage that drinks every day.

The Benchmark value for the addiction distortion for cigarettes was obtained using Gruber and Kőszegi's (2004, p.1979) estimate that the cost in terms of life years lost per pack of cigarettes in the United States is \$35.64. The purchasing power equivalent per capita GDP in Thailand is 20 percent of the U.S. and price of cigarettes in Thailand in U.S. is 1.08. See Guindon, Tobin and Yach (2002). We also used a value of 0.75 for  $\Phi$  as in the alcohol addiction calculations. Taken together, our benchmark value for  $\delta_A$  for cigarettes is  $(0.75-1)(35.64/1.08)(0.20) = -1.65$ , implying that the "neglected cost" per package of cigarettes in Thailand is 165 percent of the actual price. The Low Case is 50% of the Benchmark Case and the High Case is twice the Benchmark Case. The estimate for the proportion of addicted smokers is the 18 percent of Thais who are reported to be regular smokers.<sup>16</sup>

### Market power

Imperfect competition is a market distortion, but it has played little role in the discussion of excise tax policy, even though in beer and tobacco markets are highly concentrated in many countries.<sup>17</sup> For example, Cnossen and Smart (2005) do not discuss the implications of firms' market power for setting cigarette taxes. In our calculation, we incorporate a measure of the distortion caused by market power in the beer and white whiskey market, the tobacco market, and the mobile phone market in Thailand. The latter is included, even though an excise tax was not levied on telecommunication services in 2002 because excise tax increases on alcohol, tobacco, and fuels might increase (decrease) the demand for telecommunication services leading to an improvement (deterioration) in resource allocation.

The domestic beer market in Thailand is dominated by two large firms—Boon Rawd Brewery Co. and Thai Beverage PLC. In 2002, Thai Beverage PLC had 65 percent of the beer market and Boon Rawd Brewery Co. had 26 percent. Thai Beverage PLC also has a monopoly power over the white liquor market.<sup>18</sup>

The market power parameter for alcohol was based on the assumption that the sale of beer and white liquor, which represent approximately 70 percent of total alcohol sales, is a Cournot duopoly. Therefore,  $\delta_M = 0.5(1/-2.7)0.70 = 0.13$  where the 0.5 is one divided by the number of firms and -2.7 is an estimate of the elasticity of demand for beer and white liquor from the study by TDRI (2005).<sup>19</sup> This calculation implies that the firms earn a pure profit margin of 13 percent. The High Case is twice the Benchmark Case and the Low Case is 50 percent of the Benchmark Case. It is

<sup>15</sup> These figures are from the Health and Welfare Survey (HWS) in 2003. The survey is conducted by National Statistical Office of Thailand. It interviews health status, healthcare insurance coverage, healthcare expenditure, and health related behaviour.

<sup>16</sup> From Health and Welfare Survey in 2003.

<sup>17</sup> See Delipalla and O'Donnell (2001) on the concentration of EU cigarette markets.

<sup>18</sup> (For a summary of market competition, see in an appendix available from the authors upon request.)

<sup>19</sup> In the TDRI study the price elasticities for color liquor, white liquor, imported liquor, beer and wine were -1.56, -2.73, -0.61, -2.68 and -0.60 respectively.

assumed that marginal changes in pure profits are taxed at the statutory Thai corporate income tax rate of 30 percent. Our analysis is based on the assumption that excise taxes are fully shifted to consumers. However, a study by Young and Bielińska-Kwapisz (2002) indicates that taxes on beer and spirits are over-shifted in the United States. In their study, taxes on beer and spirits increased consumer prices by approximately 1.7 times the tax rate. We also briefly consider the impact of the over-shifting of alcohol excise taxes on the MCF for alcohol.

The Thai Tobacco Monopoly (TTM) has a monopoly in production of domestic brands. The market power distortion in the Benchmark Case,  $\delta_M = 0.20$ , is based on an estimate of the market power of European tobacco companies from a study by Delipalla and O'Donnell (2001).<sup>20</sup> We have assumed that all of the profits of the TTM go to the Thai government, or  $\tau_\pi = 1$ . Therefore, the total effective tax rate on cigarettes in the benchmark case is  $0.587 + 0.20 = 0.79$ , which is very close to the effective tax rate that Sarntisart (2003, p.43) used in his study of tobacco control in Thailand. The High Case is twice the benchmark case and the Low Case is half the benchmark case.

The mobile phone market in Thailand is dominated by two large firms —Advance Info Service PLC and Total Access Communication PLC. In the absence of other information about the degree of market power exercised by these firms, we have assumed that the  $\delta_M$  is 0.25 in the Benchmark case, 0.55 in the High Case, and 0.10 in the Low Case.<sup>21</sup>

Table 2 also shows the net non-tax distortions, created by the environmental and public expenditure externalities, addiction, and market power. For the Benchmark parameter values, the positive values for alcohol and telecommunications imply that the market price exceeds the net social cost and an increase in output would produce a net social gain. Therefore, a tax increase that reduces the consumption of these commodities will produce high efficiency loss because of the under-provision of these commodities. The negative values for tobacco and fuel imply that the marginal social costs of these commodities exceed their consumer price and a reduction in the consumption of these goods produces a net social gain. Thus the net non-tax distortions tend to lower the MCFs for these commodities. Of course, the tax distortions, exacerbated by smuggling, also affect the MCFs, and we consider this source of distortion below.

<sup>20</sup> Delipalla and O'Donnell (2001) used a conjectural variations framework to estimate the responsiveness of cigarette prices to tax changes in European countries. Their estimates of the tax shifting parameters were consistent with the theoretical prediction that ad valorem taxes produce smaller price increases than per unit taxes in an imperfectly competitive market. The ratio of the tax shifting effects for per unit and ad valorem taxes yields an estimate of the market power distortion of 0.219 if the price elasticity of demand for cigarettes is -0.40.

<sup>21</sup> If one assumes that the mobile phone market is a Cournot duopoly, then the  $\delta_M$  parameter could be calculated as  $0.5 (1/0.183)0.35 = 0.956$  where the 0.5 is one divided by the number of firms and 0.183 is our estimate of the elasticity of demand for telecom services and 35 percent is the mobile phone share of the total market for telecom services (International Telecommunication Union (2002), Table 2.3). This estimate of the market power distortion is very high because our estimate of the demand elasticity for telecommunications is so low. We believe the range of values that we have used in the calculation is more realistic.

### Smuggling

To capture the effect of alcohol smuggling, we use a total demand elasticity of  $\epsilon_{22}^T = -0.54$  based on the estimate of the demand for alcohol in Sarntisart (2003). A study of alcohol smuggling in Thailand by TDRI (2006) indicates that illegally produced and smuggled alcohol is about 16 percent of alcohol consumption.<sup>22</sup> For the Low Case, we use 8 percent and for the High Case we use 24 percent.

To capture the effect of tobacco smuggling, we use a total demand elasticity of  $\epsilon_{33}^T = -0.40$  based on this widely used value of the elasticity of demand for cigarettes. The Benchmark value for the proportion of smuggled cigarettes is from a survey by Sarntisart (2003, p.26) who found that “15.5% of their cigarettes packages had warning labels in English or other non-Thai languages or no warning labels, and were probably illegally imported”. The Low Case estimate was based on the results of a different survey, also described in Sarntisart (2003), where it was found that 46 percent of discarded imported cigarette packages had warning label in wrong language or no warning labels. Given that imports represent 4.89 percent of total consumption of cigarettes, the proportion of smuggled cigarettes in the Low Case was calculated as  $0.46(4.89) = 2.22$  percent. (The share of imported cigarettes was based on figures in Sarntisart (2003 Table 3.4 p. 9).) The High Case figure is twice the Benchmark figure.

### CALCULATIONS OF THE MCFs

The calculations of the MCFs for the Benchmark parameter values are shown in Table 3. Alcohol taxes have the highest MCF at 2.312, followed by tobacco at 2.187, and fuels at 0.532. The large gaps between the MCFs for alcohol and tobacco and the MCF for fuels indicates that there would be a substantial welfare gain from a revenue neutral tax reform which reduced tax rates on alcohol and tobacco and increased the tax rate on fuel. However, this conclusion has to be tempered by the fact that the low MCF for fuel is likely due to our low estimate of the elasticity of demand for fuel—the elasticity of demand is one-quarter that of alcohol and tobacco.

---

<sup>22</sup> See Smith (2005, p.77) for the UK figure.

**TABLE 3: MCFs FOR EXCISE TAXES AND THE VAT: BENCHMARK PARAMETER VALUES**

	<i>Excise Tax on Alcohol</i>	<i>Excise Tax on Tobacco</i>	<i>Excise Tax on Fuel</i>	<i>VAT</i>
<i>MCFs</i>	2.312	2.187	0.532	1.080
<i>Contribution of Non-Tax Distortions to the MCFs:<sup>a</sup></i>				
Environmental Externalities, $\delta_E$	-0.075	0.052	-0.004	-0.004
Public Expenditure Externalities, $\delta_G$	-0.275	0.182	-0.012	-0.007
Market Power, $\delta_M$	0.335	0.457	-0.212	-0.005
Addiction, $\delta_A$	-0.156	-0.298	-0.0007	-0.012
Smuggling	0.323	0.618	0.022	0.019
<i>MCFs in the Absence of Non-Tax Distortions</i>	1.985	1.566	0.737	
<i>MCFs in the Absence of Non-Tax Distortions and Interactions with Other Tax Bases</i>	1.496	1.882	1.109	

<sup>a</sup>A positive (negative) value means that the factor increases (reduces) the MCF.

Although the excise taxes are the focus of our analysis, we have also calculated the MCF for a VAT increase, based on the assumption that the VAT increase would be fully reflected in the prices of alcohol, cigarettes, and fuel and increase the prices of the other expenditure categories to the same degree that their current effective tax rates reflect the VAT. Thus, for example, we assume that food, clothing, and housing would increase by 0.23, 0.251 and 0.506 percentage points from a one percent VAT increase because of zero rating and exemptions. The MCF for the VAT increase with the Benchmark parameter values was 1.080, much lower than the MCFs for alcohol and cigarette excise taxes, but higher than for the fuel excise tax. It should be borne in mind that the VAT increase is similar (although not exactly equivalent) to a proportional wage tax increase because it reduces workers' real wage rates. Our relatively low estimate for  $MCF_{VAT}$  reflects our assumption of fixed labour supplies. However, a computations of the MCF for an income tax increase in Thailand in the mid-1990s by Poapangsakorn et al. (2000, Table 6, p.76) were in the 1.04 to 1.11 range, and therefore comparable to our estimate of the MCF for a VAT increase.

Our main contribution to the calculation of MCFs for commodity taxes is that we have incorporated most of the key factors that affect decisions or attitudes concerning excise taxes—environmental externalities, public expenditure externalities, imperfect competition, addiction, smuggling and the interactions of tax bases—in a single model. In Table 3, we show how each of these distortions affects the MCFs for alcohol, tobacco and fuel. To assess the contribution of each distortion to the MCFs, we set each one in turn equal to zero and then recalculated the MCFs. For example, our calculations indicated that if all environmental externalities were ignored, the MCF for alcohol would have been 2.387 instead of 2.312. Therefore, incorporating the environmental externalities at the Benchmark parameter values reduced the MCF for alcohol by 0.075. Similarly, environmental externalities increased the MCF for tobacco taxes by 0.052. This may seem surprising, but it can be explained by the fact

that the  $\delta_E$  for tobacco is quite low and an increase in tobacco taxes would increase the demand for fuels (with a cross-price elasticity of 0.218) where  $\delta_E$  parameter is four times larger (in absolute value). Similarly, incorporating the public expenditure externalities reduces the MCF for alcohol taxes by 0.275, but increases the MCF for cigarette taxes by 0.182.

The market power distortion raises the MCFs for alcohol and tobacco by 0.335 and 0.457 respectively, but lowers the MCF for fuel by 0.212, even though the fuel industry is assumed to be competitive. The reason for the reduction in the MCF for fuel is that a fuel tax increase raises the demand for alcohol (with a cross-price elasticity of 0.524), and this helps to offset the alcohol market power distortion.

As might be expected, incorporating addiction significantly reduces the MCFs for excise taxes on alcohol and cigarettes. The 0.298 reduction in the MCF for cigarettes is relatively large because addicted smokers are assumed to ignore costs of smoking that are 165 percent of the product price in our Benchmark Case. However, smuggling has an even greater impact on the MCFs for alcohol and tobacco, raising them by 0.323 and 0.618 respectively, i.e. the impact of smuggling more than offsets the impact of addiction on the MCFs. The second last row in Table 3 shows the MCFs in the absence of the non-tax distortions (including smuggling). These calculations indicate that the combined effect of the non-tax distortions and smuggling increase the MCFs for alcohol and tobacco excises, but reduces the MCF for fuel taxes.

The last row of Table 3 shows how the MCF is affected by a failure to account for the effect of an excise tax rate change on tax revenues from other tax bases. (Most discussions of tobacco taxation, such as Sunley et al. (2000, Table 17.5, p.423), only focus on the effect of a tobacco tax increase on tobacco tax revenues and ignore the effects on other sources of tax revenue.) Our calculations show that incorporating the effects on other tax revenue sources is very important in evaluating an alcohol excise increase. The MCF for alcohol would be significantly underestimated if we ignore the effects of an alcohol tax rate increase on the revenues from other commodity taxes. Recall that our demand estimation indicates that alcohol is a complement for both tobacco and fuel, with cross-price elasticities of -0.516 and -0.304 respectively. Increasing the alcohol excise tax reduces revenues for these other two heavily taxed commodities, and this account in part for alcohol's relatively high MCF. Conversely, incorporating the interactions with the other tax bases lowers the MCFs for tobacco and fuel taxes.

Our computations in Table 3 are based on the assumption that excise taxes are fully reflected in consumer prices. However, in imperfectly competitive markets, taxes may be under-shifted or over-shifted even if the marginal cost of production is constant in the long-run. As previously noted, Young and Bielińska-Kwapisz (2002) found that beer and spirit prices in the United States increased by about \$1.70 for a \$1.00 excise tax increase. If the same degree of over-shifting of the alcohol excise taxes occurs in Thailand, then the MCF for the alcohol excise tax would be 8.927, making it an extremely expensive source of tax revenue. The sensitivity of the calculation of the MCFs to the degree of tax shifting indicates that future research should try to determine the degree to which excise taxes are over or under-shifted in imperfectly competitive markets.

To summarize, our analysis indicates that smuggling, market power, and addiction have potentially large impacts on the MCFs, especially for tobacco taxes, and that interactions with other tax bases is especially important for calculating the MCFs for excise taxes.

These conclusions are based on a particular set of parameter values. To determine the sensitivity of our results to the choice of the parameter values, we recalculated the MCFs using the High Case and Low Case values for the parameters. Table 4 indicates that the MCFs are lower in the High Case. This means that the higher parameter values for the environmental and public expenditure externalities and addiction more than offset the use of the higher parameter values for market power and smuggling. The contributions of the various distortions to the MCFs are also generally larger (in absolute value) than in the Benchmark case. The only major anomaly is that the public expenditure externality now reduces the MCF for tobacco.

**TABLE 4: MCFs FOR EXCISE TAXES AND THE VAT: HIGH DISTORTION CASE**

	<i>Excise Tax on Alcohol</i>	<i>Excise Tax on Cigarettes</i>	<i>Excise Tax on Fuel</i>	<i>VAT</i>
<i>MCFs</i>	1.95	2.10	0.32	1.05
<i>Contributions of Non-Tax Distortions to the MCFs:<sup>a</sup></i>				
Environmental Externalities, $\delta_E$	-0.243	0.257	-0.016	-0.012
Public Expenditure Externalities, $\delta_G$	-0.725	-0.220	-0.010	-0.021
Market Power, $\delta_M$	0.388	0.442	-0.424	-0.004
Addiction, $\delta_A$	-0.304	-0.629	0.00006	-0.024
Smuggling	0.269	1.178	0.019	0.031

<sup>a</sup>A positive (negative) value means that the factor increases (reduces) the MCF.

Table 5 shows similar calculations for the Low Case parameters values. The MCFs for alcohol and tobacco are lower than in the Benchmark case, but the MCF for fuels increases from 0.532 to 0.645. Thus the rankings of the MCFs for the three excise taxes are the same in the Benchmark and Low Cases, but rankings of alcohol and tobacco are reversed in the High Case.

**TABLE 5: MCFs FOR EXCISE TAXES AND THE VAT: LOW DISTORTION CASE**

	<i>Excise Tax on Alcohol</i>	<i>Excise Tax on Cigarettes</i>	<i>Excise Tax on Fuel</i>	<i>VAT</i>
<i>MCFs</i>	2.220	1.794	0.645	1.083
<i>Contributions of Distortions to MCF:<sup>a</sup></i>				
Environmental Externalities, $\delta_E$	-0.028	0.029	-0.002	-0.001
Public Expenditure Externalities, $\delta_G$	-0.090	0.086	-0.007	-0.003
Market Power, $\delta_M$	0.182	0.200	-0.095	0.004
Addiction, $\delta_A$	-0.069	-0.109	-0.001	-0.006
Smuggling	0.198	0.142	0.014	0.009

<sup>a</sup>A positive (negative) value means that the factor increases (reduces) the MCF.

The large gap between the MCFs for the excise taxes on alcohol and cigarettes and the MCF for the fuel excise tax indicates that there is a potentially large efficiency gain from a revenue-neutral tax reform that would increase the fuel excise tax and reduce the excise taxes on alcohol and cigarettes. We can give an indication of the potential size of these gains by considering small cuts in the alcohol and cigarette excise taxes, offset by a revenue-neutral increase in the fuel excise tax. The gains and losses from these tax revenue changes can be evaluated at the average of the pre-reform and post-reform MCFs and compared to the total increase in fuel tax revenue. For example, using the Benchmark parameter values, the fuel excise tax would have to be raised by a 0.688 percentage point to maintain revenues if the excise taxes on alcohol and tobacco were each cut by one percentage point. This revenue-neutral tax reform would increase the MCF for the fuel excise tax from 0.532 to 0.536 and lower the MCFs for alcohol and tobacco excises from 2.312 to 2.269 and from 2.187 to 2.137 respectively. Evaluated at the average of the pre-reform and post-reform MCFs, there would be a net efficiency gain of 1.72 Baht for each additional Baht of fuel tax revenue collected. One limitation of our approach is that does not allow us to determine how large the revenue-neutral fuel tax increase should be to maximize the net efficiency gain from this type of excise tax reform.

#### CALCULATIONS OF THE SMCFS

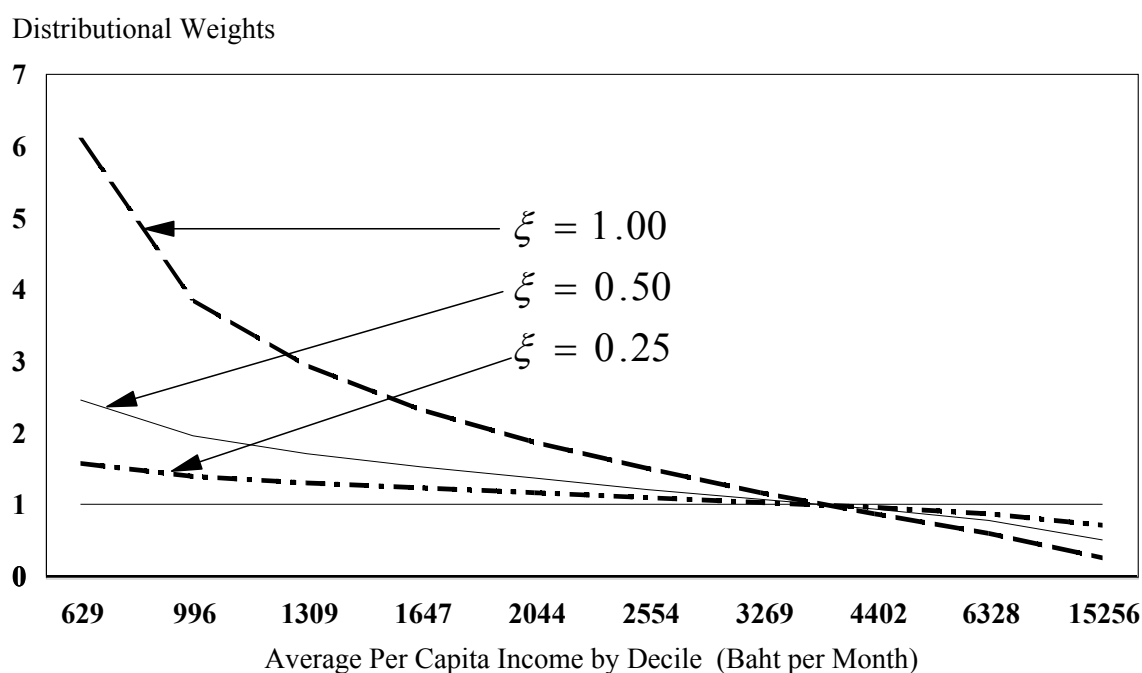
To calculate the distributionally-weighted MCFs for the three excise taxes, we have computed the  $\beta$ s using (21) and using a fairly conventional range of values for  $\xi$ , 0.25 to 1.00. The average per capita monthly income in Thailand of 3,844 Baht in 2002 was used as the reference income level.<sup>23</sup> Figure 1 shows the distributional weights at the average income levels in the 10 deciles. The distributional weights range between 1.572 and 6.114 at the average income in the first decile, 629 Baht per month, and between 0.708 and 0.252 at the average income level in the 10<sup>th</sup> decile, 15,256 Baht per month, when the values of  $\xi$  range between 0.25 and 1.00. To compute the distributional characteristics of the commodities, we have used the expenditure patterns of 90 household groups (based on data from five urban areas and four rural

<sup>23</sup> In July 2002, one Baht was worth approximately 0.024 US dollars.



regions in each decile) from the Socio-Economic Survey (SES) 2002. Table 6 shows the computed distributional characteristics for all of the commodities for values of  $\xi$  between 0.25 and 1.00, normalized so that the distributional characteristic for food is equal to one. Note that when  $\xi = 0.25$ , alcohol, tobacco and fuel have almost identical distributional characteristic values, around 0.88. Therefore, with a moderate set of distributional weights, the relative SMCFs are the same as their efficiency components, the MCFs. Divergences in the distributional characteristics appear when larger values of  $\xi$  are used. Among the three commodities subject to the excise taxes, tobacco has the lowest  $\omega$ . Electricity and fuels has the highest when  $\xi = 0.50$  and alcohol has the highest when  $\xi = 1.00$ . Therefore, the relative ranking of the distributional characteristics varies with the magnitudes of the distributional weights.

**FIGURE 1: DISTRIBUTIONAL WEIGHTS BY DECILE**



**TABLE 6: DISTRIBUTIONAL CHARACTERISTICS FOR THE MAJOR EXPENDITURE CATEGORIES IN THAILAND**

	$\xi = 0.00$	$\xi = 0.25$	$\xi = 0.50$	$\xi = 1.00$
	<b>Normalized Distributional Characteristics</b>			
<b>Food</b>	1.000	1.00	1.000	1.000
<b>Alcohol</b>	1.000	0.882	0.835	0.762
<b>Tobacco</b>	1.000	0.885	0.821	0.707
<b>Clothing</b>	1.000	0.942	0.893	0.828
<b>Health</b>	1.000	0.940	0.849	0.721
<b>Electricity and Fuels</b>	1.000	0.957	0.874	0.754
<b>Telecommunications</b>	1.000	0.888	0.799	0.660
<b>Housing and Water</b>	1.000	0.987	0.922	0.824
<b>Entertainment</b>	1.000	0.904	0.801	0.659
<b>Other</b>	1.000	0.910	0.827	0.700
	<b>SMCFs<sup>a</sup></b>			
<b>Alcohol Excise</b>	2.311	2.038	1.930	1.761
<b>Tobacco Excise</b>	2.183	1.932	1.792	1.543
<b>Fuel Excise</b>	0.533	0.510	0.465	0.402

<sup>a</sup>Based on the Benchmark parameter values.

The bottom panel of Table 6 shows the SMCFs for the three excise taxes using the distributional characteristics for the three goods. Note that the ranking of the SMCFs is the same as the MCFs—the fuel excise tax always has the lowest social cost, followed by tobacco, and the alcohol excise has the highest SMCF. Consequently, placing higher weights on the losses sustained by lower income groups does not alter the view, based solely on efficiency considerations, that a revenue-neutral increase in fuel excise taxes and a cut in alcohol and tobacco excise taxes would represent an improvement in social welfare.

## CONCLUSION

The major contribution of this paper is to expand the Ahmad-Stern framework for evaluating marginal commodity tax reforms by incorporating the most important non-tax distortions that influence the setting of excise taxes on alcohol, tobacco and fuels in Thailand. Some of these distortions, such as environmental externalities and addiction, reduce the social marginal cost of imposing excise taxes; other distortions, such as the exercise of market power by producers of alcohol and tobacco and smuggling, tend to raise the MCFs for these excise taxes. While there is a great deal of uncertainty about the appropriate values for these parameters, our analysis provides a framework within which the net effects of these offsetting distortions can be evaluated. Our results indicate that smuggling, market power, and addiction have potentially large impacts on the MCFs, especially for tobacco taxes, and that interactions with other tax bases is especially important for calculating the MCFs for excise taxes. Our overall conclusion is that the MCFs for alcohol and tobacco excise taxes in Thailand are much higher than for fuel excise taxes and that there would be substantial welfare gain from a revenue-neutral reduction in the excise tax rates on alcohol and tobacco and an increase in fuel excise tax rates.

There are a number of areas where more research and data collection would help in the evaluation of the excise taxes in Thailand. First, the interaction between commodity prices and labour income should be investigated in light of the recent results obtained by West and Williams (2006) for the U.S. Second, the possibility of over-shifting of excise taxes, which has been recorded in the market for alcohol in the U.S. by Young and Bielińska-Kwapisz (2002), should be investigated in Thailand. Third, tourism is an important industry in Thailand, and foreign tourists may bear a significant portion of the excise taxes on alcohol and tobacco. Significant levels of “tax exporting” to tourists might reduce the MCFs for these excise taxes. Finally, businesses and industry pay some of the fuel excise taxes and to the extent that the fuel excises exceed their marginal externality costs, they may create relatively large welfare losses by distorting firm’s production decisions. These effects should also be included in the computation of the MCF for the fuel taxes.

## REFERENCES

- Ahmad, E. and N. Stern (1984), "The Theory of Reform and Indian Indirect Taxes", *Journal of Public Economics*, 25(3): 259-298.
- Ahmad, E. and N. Stern (1990), "Tax Reform and Shadow Prices for Pakistan", *Oxford Economic Papers*, 42(1): 135-59.
- Badenes-Plá, N. and A. Jones (2003), "Addictive Goods and Taxes: A Survey from an Economic Perspective", *Hacienda Pública Española / Revista de Economía Pública*, 167(4): 123-153
- Bank of Thailand, available at <http://www.bot.or.th/bothomepage/databank/EconData/Econ&Finance/>.
- Bernheim, B. and A. Rangel (2005), "Behavioral Public Economics: Welfare and Policy Analysis with Non-Standard Decision Makers", NBER Working Paper 11518.
- Burgess, R. and N. Stern (1993), "Taxation and Development", *Journal of Economic Literature*, 31(2): 762-830
- Chaloupka, F., M. Grossman, and H. Saffer (2002), "The Effects of Price on Alcohol Consumption and Alcohol-Related Problems", *Alcohol Research and Health*, 26(1): 22-34.
- Cnossen, S. (2005), *Theory and Practice of Excise Taxation - Smoking, Drinking, Gambling, Polluting, and Driving*, Oxford University Press, Oxford.
- Cnossen, S. and Smart, M. (2005), "Taxation of Tobacco", in S. Cnossen (ed.) *Theory and Practice of Excise Taxation - Smoking, Drinking, Gambling, Polluting, and Driving*, Oxford University Press, Oxford, Chapter 2: 20-55.
- Cook, P. and M. Moore (2002), "The Economics of Alcohol Abuse and Alcohol-Control Policies", *Health Affairs*, 21(2): 120-133.
- Cragg, M. (1991), "Do we care? A Study of Canada's Indirect Tax System", *Canadian Journal of Economics*, 24(1): 124-143.
- Dahlby, B. (forthcoming), *The Marginal Cost of Public Funds: Theory and Applications*, MIT Press, Boston.
- Deaton, A. and J. Muellbauer (1980), *Economics and Consumer Behavior*, Cambridge University Press, New York.
- Decker, S. and A. Schwartz (2000), "Cigarettes and Alcohol: Substitutes or Complement?", NBER Working Paper No. 7535.
- Decoster, A. and E. Schokkaert (1990) "Tax Reform Results with Different Demand Systems" *Journal of Public Economics* 41(3): 277-296.
- Delipalla, S. and O. O'Donnell. (2001), "Estimating Tax Incidence, Market Power and Market Conduct: The European Cigarette Industry", *International Journal of Industrial Organization* 19(6): 885-908.
- The *Economist* (2006), "The Avuncular State", Special Report on the New Paternalism, April 26<sup>th</sup>: 67-69.

- Feldstein, M. (1972), "Distributional Equity and the Optimal Structure of Public Prices", *American Economics Review*, 62(1): 32-36.
- Galbraith, J.W. and M. Kaiserman (1997), "Taxation, Smuggling and Demand for Cigarettes in Canada: Evidence for Time-Series Data", *Journal of Health Economics*, 16(3): 287-301.
- Goel, R. and M. Morey (1995), "The Interdependence of Cigarette and Liquor Demand", *Southern Economic Journal*, 62(2): 451-459.
- Grossman, M. (2004), "Individual Behaviors and Substance Use: The Role of Price", NBER working paper 10948, December.
- Grossman, M., J. Sindelar, J. Mullahy, and R. Anderson (1993), "Policy Watch: Alcohol and Cigarette Taxes", *Journal of Economic Perspectives*, 7(4): 211-222.
- Gruber, J and B. Köszegi (2004), "Tax Incidence When Individuals Are Time-Inconsistent: The Case of Cigarette Excise Taxes", *Journal of Public Economics*, 88(9-10): 1959-1987.
- Gruber, J, A. Sen, and M. Stabile (2002), "Estimating Price Elasticities when there is Smuggling: The Sensitivity of Smoking to Price in Canada", NBER working paper 8962.
- Gruber, J. and S. Mullainathan (2005), "Do Cigarette Taxes Make Smokers Happier", *Advances in Economic Analysis and Policy*, 5(1): Article 4.
- Guindon, G., S. Tobin, and D. Yach (2002), "Trends and Affordability of Cigarette Prices: Ample Room for Tax Increases and Related Health Gains", *Tobacco Control*, 11: 35-43.
- International Telecommunication Union (2002) "Bits and Bahts: Thailand Internet Case Study," Geneva, Switzerland, March. available at [www.itu.int/asean2001/reports/material/THA%20CS.pdf](http://www.itu.int/asean2001/reports/material/THA%20CS.pdf)
- Irvine, I. and W. Sims (1993), "The Welfare Effects of Alcohol Taxation" *Journal of Public Economics*, 52(1): 83-100.
- Jones, A. (1989), "A Systems Approach to the Demand for Alcohol and Tobacco", *Bulletin of Economic Research*, 41(2): 85-105.
- Joossens, L., F. Chaloupka, D. Merriman, and A. Yurekli, (2000), "Issues in the Smuggling of Tobacco Products", in P. Jha and F. Chaloupka (eds.) *Tobacco Control in Developing Countries*, Oxford University Press, Oxford, Chapter 16, 393-406.
- Kenkel, D. (1996), "New Estimates of the Optimal Tax on Alcohol", *Economic Inquiry*, 34(2): 296-319.
- Leung, S. and C. Phelps (1993), "My Kingdom for a Drink...? A Review of Estimates of the Price Sensitivity of Demand for Alcoholic Beverage", in M.E. Hilton and G. Bloss (eds.), *Economics and the Prevention of Alcohol Related Problems*, Proceedings of Workshop on Economics and Socioeconomic Issues in the Prevention of Alcohol-Related Problems. October 10-11, 1991.

- Liberati, P. (2001), "The Distributional Effects of Indirect Tax Changes in Italy", *International Tax and Public Finance*, 8(1): 27-51.
- Madden, D. (1995), "Labour Supply, Commodity Demand and Marginal Tax Reform", *Economic Journal*, 105(429): 485-497.
- Manning, W., E. Keeler, J. Newhouse, E. Sloss, and J. Wasserman (1989), "The Taxes of Sin: Do Smokers and Drinkers Pay Their Way?", *Journal of American Medical Association*, 261: 1604-1609.
- Merriman, D., A. Yurekli, and F. Chaloupka (2000), "How Big is the Worldwide Cigarette Smuggling Problem?", in P. Jha and F. Chaloupka (eds.), *Tobacco Control in Developing Countries*, Oxford University Press, Oxford, Chapter 15: 365-392.
- Ministry of Public Health, (2004), *Public Health in Thailand 1999-2004*. Ministry of Public Health, Bangkok.
- National Statistical Office, (2002), *Socio-Economic Survey Data Tape 2002*, Bangkok.
- National Statistical Office, (2003), *Health and Welfare Survey Data Tape 2003*, Bangkok.
- Newbery, M. (2005), "Road User and Congestion Charges" in S. Cnossen (ed.) *Theory and Practice of Excise Taxation - Smoking, Drinking, Gambling, Polluting, and Driving*, Oxford University Press, Oxford, Chapter 7: 193-229.
- Norton, D. (1988), "On the Economic Theory of Smuggling", *Economica* 55(217): 107-118.
- O'Donoghue, T. and M. Rabin, (2006), "Optimal Sin Taxes", *Journal of Public Economics*, 90(10-11):1825-1849.
- Parry, I. (2003), "On the Costs of Excise Taxes and Income Taxes in the UK", *International Tax and Public Finance*, 10(3): 281-304.
- Parry, I. and K. Small (2005), "Does Britain or the United States Have the Right Gasoline Tax?", *American Economic Review*, 95(4): 1276-1289.
- Pattamasiriwat, D. (1989), "A Study of Consumption Pattern using National Income Account", *Chulalongkorn Journal of Economics*, 1(2): 244-264. (in Thai).
- Poapongsakorn, N., K. Charnvitayapong, D. Laovakul, S. Suksiriserekul and B. Dahlby (2000), "A Cost-Benefit Analysis of the Thailand Taxpayer Survey", *International Tax and Public Finance*, 7(1): 63-82.
- Pogue, T. and L. Sgontz (1989), "Taxing to Control Social Costs: The Case of Alcohol", *American Economic Review*, 79(1): 235-243.
- Ray, R. (1997), "Issues in the Design and Reform of Commodity Taxes: Analytical Results and Empirical Evidence", *Journal of Economic Surveys*, 11(4): 353-388.
- Rosenberger, R. and J. Loomis (2003), "Benefit Transfer", in P. Shamp, K. Boyle and T. Brown (eds.), *A Primer on Nonmarket Valuation*. Kluwer Academic Publishers, Dordrecht, Chapter 12, 445-482.

- Santoro, A. (no date), "Marginal Commodity Tax Reforms: A Survey" working paper, University of Milan-Bicocca.
- Sarntisart, I. (2003), *Economic Analysis for Tobacco Control in Thailand*. A Report for Discussion "Health, Nutrition and Population, Tobacco Free Initiative," World Health Organization. (in Thai)
- Smith, S. (2005), "Economic Issues in Alcohol Taxation" in S. Cnossen (ed.), *Theory and Practice of Excise Taxation - Smoking, Drinking, Gambling, Polluting, and Driving*, Oxford University Press, Oxford, Chapter 3, 56-83.
- Sriyookrat, P. (2001), *A Study of Market Structure and Factor Affecting Demand for Alcoholic Beverages in Thailand*. A Thesis for Master of Science (Agricultural Economics), Department of Agricultural and Resource Economics, Kasetsart University.
- Sunley, E., A. Yurekli, and F. Chaloupka (2000), "The Design, Administration, and Potential of Tobacco Excises" in P. Jha and F. Chaloupka (eds.), *Tobacco Control in Developing Countries*, Oxford University Press, Oxford, Chapter 17, 409-426.
- Tanzi, V., and H. Zee (2000), "Tax Policy for Emerging Markets: Developing Countries", *National Tax Journal*, 53(2): 299-322.
- TDRI (2005), *Alcoholic Beverage Consumption in Thailand*. Thailand Development Research Institute, Bangkok (in Thai).
- TDRI (2006), "An Impact Assessment of Alcoholic Beverage Tax on Its Price and Consumption", Thailand Development Research Institute, Bangkok, (in Thai).
- Thai Beverage PCL. (2005), *Prospectus: ThaiBev PCL*. available at [www.bangkokbiznews.com/2005/special/beerchang/](http://www.bangkokbiznews.com/2005/special/beerchang/) downloaded on Feb. 21, 2006 (in Thai).
- Usher, D. (1986), "Tax Evasion and the Marginal Cost of Public Funds", *Economic Inquiry*, 24(4): 563-586.
- Wade, S. (2003), "Price Responsiveness in the AEO2003 NEMS Residential and Commercial Buildings Sector Models", Energy Information Administration Publication. ([www.eia.doe.gov/oiaf/analysispaper/elasticity/pdf/buildings.pdf](http://www.eia.doe.gov/oiaf/analysispaper/elasticity/pdf/buildings.pdf) downloaded on Aug. 30, 2006).
- West, S. and R. Williams III (2007), "Optimal Taxation and Cross-Price Effects on Labor Supply: Estimates of the Optimal Gas Tax", *Journal of Public Economics*, 91(3-4): 593-617.
- Young, D. and A. Bielińska-Kwapisz (2002), "Alcohol and Beverage Prices" *National Tax Journal*, 55(1): 57-73.