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**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.

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Judicial Control of Tax Negotiation

Sandra Eden

Abstract
This article considers the supervisory jurisdiction of the UK courts through an examination of their control of the UK tax authorities. It concentrates on the conditions under which the tax authorities have been authorized by the UK courts to enter extra statutory arrangements to afford some taxpayers concessional treatment. The article considers the basis of judicial review and then examines the legislative framework within which the Revenue operates. With this background the article considers the principles of judicial review in tax cases. Starting with the general principles, it then examines the argument that the Revenue makes extra statutory concessions on the basis of its powers of care and management and it considers the limitations of that argument. The cases dealing with legitimate expectation are examined too, as are the limits on the legitimate expectation principle. Finally, the article considers “the slippery principle of equality” within the UK constitution and the equally frustrating (for third parties) problem of establishing locus standi.

The article concludes that there are significant tensions between competing interests when the Courts review the Revenue’s granting of extra statutory concessions. They seem to have afforded the taxing authorities considerable autonomy in their fulfilment of their management function, but they have limited them to the exercise of discretion only in the course of their care and management of the tax system and in the context of their primary duty to collect tax. The author concludes that the courts have done well in balancing the interests of the tax authorities and taxpayer but that wider interests, such as equality between taxpayers, have not fared as well.

INTRODUCTION
The main purpose of this paper is to consider the supervisory jurisdiction of the UK courts through an examination of their control of the UK tax authorities. One particular aspect is an examination of the conditions under which the tax authorities have been authorised by the UK courts to enter into agreements or make public statements to the effect that they will collect less tax than that which may be regarded as officially due. This is, on the face of it, a curious phenomenon as under traditional British constitutional law it is the legislature alone which may determine the conditions under which tax is to be payable.

The judicial control of the exercise of executive powers constitutes an interesting object of enquiry from a number of angles. From a constitutional perspective, from where does the courts’ authority to permit behaviour which apparently contradicts the intention of parliament derive? How can they authorise acts by a public body which appear to be in direct conflict with the statutory rules relating to the obligation of the citizens to pay tax? This raises deep and difficult questions about the source of the courts’ authority, which in turn raise even deeper and more difficult questions about the democratic justification of the imposition of authority by the state. From a narrower legal perspective, what principles are used by the courts to govern the relationship between the revenue authorities and the taxpayer? What does it tell us about the nature of judicial control of public bodies, and is there anything of particular interest in the operation of these principles in the context of taxation?

*Sandra Eden is a Senior Lecturer in the School of Law, Edinburgh University, Scotland, UK.
These big constitutional issues are generally considered either in the context of cases on fundamental human rights such as personal liberty or freedom of speech, or in the context of cases where the division of power between the judiciary and the legislature are brought into sharp distinction, such as ouster clauses. Although taxation is providing an increasingly important field for judicial review, the constitutional implications of the cases remain relatively unexamined.

THE BASIS OF JUDICIAL REVIEW IN THE UK

The function of judicial review is relatively clear: it is the control of the power exercised by the executive. The principles which underpin the procedure have been developed exclusively by the courts. Although under traditional democratic theory it is for the legislature to control the executive, the rise in the role in the state, the increase in legislation and the increasing difficulty of the legislature in controlling the executive has resulted in an exponential increase in the role that the courts play in the regulation of the bodies of the state.

In developing their contemporary supervisory jurisdiction, the courts have arrogated to themselves considerable powers over the executive and have assumed constitutional functions which, traditionally have been exercised by the legislative branch.

Whilst the function of judicial review is clear, its constitutional basis is open to debate. The traditional explanation of the foundation of the courts’ supervisory powers is found in the theory of parliamentary sovereignty and the doctrine of ultra vires. The theory of parliamentary supremacy dictates that once parliament has been elected, its authority is unchallengeable; the rule of law derives its authority from its parentage, not its content.

[The legislative outcome of the political battle derives its moral authority entirely from its pedigree as the product of a decision-making procedure to which all parties and interest-groups have access, according to their numbers and strengths.]

This has been termed the majoritarian concept of democratic rule. In terms of this theory, the power of parliament is based on the legitimacy granted by the democratic process of voting. The imposition of the authority of the courts derives from and is subservient to political process. When the courts are engaged in the function of patrolling the exercise of statutory powers by statutory authorities, the only principles to which they are entitled to have recourse are those emanating from Parliament. Courts are able to impose the duties of acting reasonably on the public bodies because, on the basis of the traditional view of ultra vires, Parliament must have intended that they so act. Thus the doctrine of ultra vires derives ultimately from the will of

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1 There is some procedural regulation of the process, for example the Supreme Court Act 1981 and Order 53 of the Rules of the Supreme Court SI 1977 No 1955.
3 Of course this no longer holds true for the UK with the advent of the accession to the European Union and now the enactment of the Human Rights Act 1998.
5 Allan, supra. See also Oliver, Common Values and the Public-Private Divide (Butterworths 1999).
Parliament via the medium of statutory interpretation. Sir William Wade, one of the leading exponents of administrative law in the UK expresses this as follows,

Having no written constitution on which he can fall back, the judge must in every case be able to demonstrate that he is carrying out the will of Parliament as expressed in the statute conferring the power. He is on safe ground only where he can show that the offending act is outside the power, The only way in which he can do this, in the absence of an express provision, is by finding an implied term or condition in the Act, violation of which then entails the condemnation of ultra vires.7

The courts have a constitutional mandate only to impose the will of an elected parliament. Thus is the legitimacy of the courts’ role established in a way which is consistent with the principle of the sovereignty of parliament and legislative supremacy.

Recently there has been some debate about whether or not the orthodox view of ultra vires, utilising the principle of the implied intention of parliament, provides a coherent or sufficient account of the exercise of the courts’ supervisory powers.8 There are a number of features of judicial review which do not easily sit in this analysis. First, since 1985 in the GCHQ case9, it is clear that the principles of judicial review extend to the powers of public bodies which do not derive from parliament but which are exercised under the authority of the common law. The problem is this: how can the justification of the implied intention of parliament extend to explain the operation of those very same principles in the context of extra-statutory powers of a public body?10

There are other difficulties too: judicial review is now used to uphold the duties on public bodies to act in accordance with the European Convention of Human Rights and the EC Treaty.11 Wherever these principles come from, it is not directly from the UK parliament. The adoption of principles traditionally associated with judicial review in the sphere of the private law also is difficult to explain.12 A further objection to the “parliamentary intention” explanation lies in the observation that the content of the principles of judicial review have themselves changed over time, even in relation to the same legislation.13

The alternative explanation of the import of the duty of fairness into the exercise of power is that it has nothing to do with the implied intention of the legislature but

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10 Craig, Administrative law (Sweet and Maxwell 1999) at 5. One suggested answer to this may be that, although separate explanation may be required to be found to underpin the application of judicial review principles in the non-statutory context, the deemed intention of parliament still remains the foundation of the courts’ authority in areas where statutory powers are being exercised. Eg Forsyth, “Of Fig Leaves and Fairy Tales: The Ultra Vires Doctrine, the Sovereignty of Parliament and Judicial Review” 55 [1996] CLJ 122, reprinted in Forsyth (ed), Judicial Review and the Constitution (Hart Publishing, 2000) at 29. See also Boddington v British Transport Police [1999] 2 AC 143 per Lord Steyn at 172.
11 Human Rights Act 1998 s 6, see also Elliott, op cit note 2.
13 Craig “Ultra Vires and the Foundations of Judicial Review” in Forsyth (ed), op cit note 10 at 47.
derives independently from common law principles.\textsuperscript{14} This puts the role of the court onto a rather different footing as the direct link between the exercise of the courts’ supervisory jurisdiction and the supremacy of parliament disappears. Under communitarianism, power wielded by parliament is not absolute but is simply one manifestation of the theory of democracy under an unwritten constitution in terms of which power is transferred to parliament to be exercised subject to fundamental ideals of freedom, dignity and equality. Allan explains this thus,

\begin{quote}
It is sufficient, in the majoritarian conception, that a measure or decision has sufficient connection with whatever purpose or policy had been endorsed by ordinary legislative procedure – a judgment of formal or instrumental rationality. The rationality requirement under the communitarian conception is more demanding: it entails the rejection (or restrictive interpretation) of measures or decisions which are inconsistent with a suitably expansive, but none-the-less determinate, theory of the common good.\textsuperscript{15}
\end{quote}

Principles of fairness and justice derive from principles of citizenship and are, under communitarian theory, independent of and superior to the will of parliament. Thus the courts are not necessarily applying the will of parliament when they are asked to regulate the operations of public bodies in the process of judicial review; they are applying independent values of human dignity and the common good.

After an examination of the principles applied in tax judicial review cases, we shall return to these competing conceptions of power and ask what light, if any, the cases shed.

**THE LEGISLATIVE FRAMEWORK – THE POWERS OF THE TAX AUTHORITIES**

The statutory powers of the Inland Revenue, responsible for direct taxes, are contained in the *Inland Revenue Regulation Act* 1890 and the *Taxes Management Act* 1970. Customs and Excise operate value added tax under the *VAT Act* 1994. In contrast to the detailed nature of the legislation in substantive areas, the broad statutory powers are contained in a few brief sections.

Section 1 of the *Inland Revenue Regulation Act* 1890 provides:

\begin{quote}
(1) It shall be lawful for Her Majesty the Queen to appoint persons to be Commissioners for the collection and management of inland revenue, and the Commissioners shall hold office during Her Majesty’s pleasure.

(2) The Commissioners shall have all necessary powers for carrying into execution every Act of Parliament relating to inland revenue, and shall in the exercise of their duty be subject to the authority, direction, and control of the Treasury, and shall obey all orders and instructions which have been or may be issued to them in that behalf by the Treasury.
\end{quote}

Section 13 of the Act further provides

\begin{quote}
The Commissioners shall collect and cause to be collected every part of inland revenue, and all money under their care and management.
\end{quote}


\textsuperscript{15} Allen, op cit note 8 at 23.
Section 1 of the *Taxes Management Act 1970* states simply, “Income tax, corporation tax and capital gains tax shall be under the care and management of the Commissioners of Inland Revenue” and the “care and management” formula is similarly used in the context of all other taxes and duties.\(^\text{16}\)

There are a few legislative provisions governing administration, for example, the *Taxes Management Act 1970* s 54 provides that once a tax assessment has been appealed, the case can be settled by “agreement” which is binding on the parties\(^\text{17}\) and s102 of the same act provides the tax authorities with power to mitigate penalties on unpaid tax. There is little more.

Cumulatively, these statutory provisions do not provide very much in the way of detailed guidance and the content of the powers and duties of the tax authorities has been fleshed out in court through the challenges to the tax authorities under judicial review.

**THE PRINCIPLES OF JUDICIAL REVIEW IN TAX CASES**

**General principles**

As a preliminary point, although it was probably never seriously in doubt, it is worth noting that as recently as 1981, the House of Lords thought it worth stressing that the tax authorities were in fact subject to the supervisory jurisdiction of the courts.\(^\text{18}\) In taxation as in other areas of law, judicial review has grown exponentially over recent years and it is only in the last twenty or so years that there has been very much by way of judicial consideration of the principles involved in tax cases.

As mentioned above, under the orthodox view of judicial review, the courts are mainly concerned with ensuring that public bodies act within their powers, that is that they do not act in an ultra vires fashion. There are two aspects to this. First, an act which is simply outside the scope of a body’s powers is ultra vires and therefore void. No reliance can be placed on such acts and there are no exceptions to this as the damage caused by permitting statutory bodies to act outwith their powers is regarded as worse than any unfairness caused to individuals. Arguments based on reasonableness, rationality and fairness can never be used to make lawful the unlawful exercise of power. This strict version of the ultra vires doctrine has only featured in a very limited number of cases, but a straightforward example of an ultra vires act was a decision of the tax authorities not to make a repayment of VAT which had been paid in error.\(^\text{19}\)

More usually a case for judicial review is made on the broader version of the ultra vires doctrine, having its roots in *Wednesbury Corporation*.\(^\text{20}\) This is the principle that

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\(^\text{16}\) Eg VAT, stamp duties, car taxes, betting and gaming taxes, insurance premium tax, oil taxes.

\(^\text{17}\) *IRC v Nuttall* [1990] BTC 107 the Court of Appeal accepted that the courts had a managerial discretion to accept pecuniary settlements instead of instituting proceedings even where there was no appeal. A similar provision exists in relation to VAT: *VAT Act 1994* s 85. Whether or not there is an “agreement” is settled by normal principles of contract law: *R (on the application of DFS Furniture Co plc) v C & E Commers* [2003] BTC 5003.


that acts which are *prima facie* within the scope of a body’s lawful powers become unlawful if they are tainted by either procedural or substantive defects: an abuse of power as opposed to a simple excess of power. One is struck when reading the judgments in this area by the frequency of the reference to fairness as the overarching principle. Lord Scarman explained the principles of judicial review as follows,

> The Commissioners [of Inland Revenue] have their statutory powers and duties, the exercise of which can be challenged by the process of judicial review only if certain principles of general application are met. The taxpayer must show either a failure to discharge their statutory duty to him or that they have abused their powers or acted outside them…. [U]nfairness in the purported exercise of a power can be such that it is an abuse or excess of power.\(^{21}\)

In the context of judicial review, the concept of fairness has developed specific limitations\(^{22}\) and in particular it is clear that a high degree of unfairness, unfairness amounting to an abuse of power,\(^{23}\) is required before the courts will get involved.\(^{24}\) For example, Simon Brown L.J. observed in *Unilever* that there is a distinction between:

> …on the one hand mere unfair conduct which may be characterised as “a bit rich” but nevertheless understandable – and on the other hand a decision so outrageously unfair that it should not be allowed to stand.\(^{25}\)

It is not possible to give a definitive account of the content of fairness and indeed the judiciary are concerned that its ambit is not set in stone.\(^{26}\) There are of course the normal requirements of judicial review that the tax authorities do not fetter their discretion, take into account factors which are irrelevant or ignore factors which are relevant. Whilst not an exact analogy,\(^{27}\) conduct by the authorities which would amount to a breach of contract or representation in a private law relationship is likely to be an abuse of power.\(^{28}\) Where a substantive rather than procedural unfairness is established, for example a Revenue statement as to interpretation of the law which they then alter, the taxpayers must have relied upon it to their prejudice.\(^{29}\) There are also suggestions that the courts would expect a higher standard of behaviour from tax authorities than they would expect from private bodies.\(^{30}\)

**Exercise of the powers of care and management**

On several occasions, the argument has been put forward that statements or agreements by the tax authorities to the effect that they will not collect tax are

\(^{21}\) *R v IRC ex parte Preston* op cit note 18. See also *R v IRC ex parte Unilever plc* [1996] BTC 183 per Simon Brown at 196.

\(^{22}\) Judge J in *R v Board of Inland Revenue ex parte MFK Underwriting Agencies Ltd* [1989] BTC 561 at 584.

\(^{23}\) *R v IR Commrs, ex parte Preston* (op cit note 18), Lord Templeman, 217-218.

\(^{24}\) Simon Brown L.J in *Unilever* at 194, Judge J in *MFK Underwriting Agencies* stated at 586, “the court should be extremely wary of deciding to be unfair actions which the Commissioners themselves have determined are fair.”.

\(^{25}\) At 195.

\(^{26}\) *Unilever* per Bingham at 190, *Thompson v Fletcher* [2002] BTC 371 at 384.

\(^{27}\) *Unilever* per Simon Brown L.J at 195.

\(^{28}\) *Preston* per Lord Templeman at 219 and Lord Scarman at 223.

\(^{29}\) *Unilever* per Bingham at 190, *R v IRC ex parte SG Warburg & Co Ltd* 1994 BTC 223 per Hidden J at 201.

\(^{30}\) eg *Unilever* per Simon Brown L.J at 195.
unlawful on the basis that their statutory duty is to collect taxes, not to forgive them. The argument continues to the effect that, if an agreement not to enforce the tax legislation is outside their powers, it is unlawful on the basis of the strict ultra vires rule and can never bind a public body irrespective of unfairness or frustration of expectation. A slightly unsavoury feature of this argument is that it is generally made by the tax authorities who are seeking to extract themselves from honouring an earlier statement or agreement.31

The starting point on the power of care and management in the context of agreements not to collect tax is the House of Lords’ decision in IRC v National Federation of Self-employed and Small Businesses Ltd32 which concerned the taxation of casually employed journalists who had been proving extremely difficult to pin down and tax. There was a widespread practice of giving false names to employers and the Inland Revenue were finding it difficult to tax “Mickey Mouse of Sunset Boulevard” and other such characters. Broadly, a deal was entered into between the unions and the employers of these journalists to the effect that the Inland Revenue would not seek to recover tax from these individuals for a number of past years in return for an undertaking as to a future change in practice which would enable tax to be collected.

This so-called amnesty was challenged by a body representing other taxpayers who were outraged by the preferential treatment offered to the “Fleet Street casuals” which compared unfavourably with what they perceived as being their own treatment in the hands of the taxing authorities. Lurking in the background to the case is the clear sense that the “goods guys” thought that the advantageous treatment of the “bad guys” was due to the underlying threat of industrial action in an industry renowned for striking in the 1970s, a fear not substantiated on the evidence presented to the court, at least.

There are two angles to the House of Lord’s judgment. One is procedural, concerning the standing of the National Federation to seek review of the Inland Revenue’s decision and this is considered later. The other is substantive: whether the deal was one that the Inland Revenue had the power to make. The House of Lords decided that it did. It was unanimously held that the making of such deals was within the lawful exercise of the wide powers conferred within the “care and management” formula. Only if the deal had been motivated by other than managerial purposes would the deal have been unlawful. Quite how widely the scope of managerial purposes extends was not discussed, although it can reasonably be implied from the judgments that if the deal had been made to avoid a strike, this would have been regarded as inappropriate.

Lord Roskill best explained the reasoning as follows,

The [Inland Revenue] were in no way arrogating to themselves a right not to comply with their statutory obligations under the statute to which I have referred. On the contrary, the whole case was that they had made a sensible arrangement in the overall performance of their statutory duties in connection with taxes management, an arrangement made in the best interests of everyone directly involved and, indeed of persons indirectly involved, for the agreement reached would be likely to lead ultimately to a

31 For example MFK Underwriting Agencies Ltd (note 22) Al Fayed (note 19). Although see National Federation op cit note 18.
greater collection of revenue than if the agreement had not been reached or ‘amnesty’ granted.\(^\text{33}\)

In other words, if you have to dangle the carrot of not collecting past tax in order to persuade taxpayers to comply with their duties to pay future tax, this is within the scope of what is reasonable. Adverse comments can be expressed on this view, such as it is hard to believe that the Inland Revenue would not have the legal powers to ensure that tax was collected in the future and, if they did not, how were they to expect the employers to operate PAYE or the reporting requirements without legal authority? Leaving such criticisms aside, this case provides clear authority for the view that it is within the powers of the tax authorities to agree not to collect tax, and furthermore, makes it clear that the tax authorities are invested with wide discretionary powers, the use of which are only to be disturbed in the clearest possible cases.

Subsequently, the Inland Revenue’s power to come to a negotiated settlement was confirmed in *IRC v Nuttall*\(^\text{34}\) in which a taxpayer was seeking to escape from an earlier agreement on the basis that it was not within the Inland Revenue’s capacity to make it. Drawing on *National Federation*, the Court of Appeal unanimously held that such settlements (or “back tax agreements” as they are frequently described) fell within the powers or care and management awarded under s 1 of the 1890 Act.

**Limitations on the power of care and management**

The Inland Revenue have operated a system of extra-statutory concessions in the UK for many years which are now widely available in published form. Extra-statutory concessions, almost legislative in tone, operate to excuse the taxpayer from paying the correct amount of tax in tightly drawn situations. They provide exemptions where the strict legal situation is thought by the tax authorities to produce a result which is either unfair, anomalous or inappropriate to enforce given the amounts involved. The booklet in which they are published prefaces them with the words,

An extra-statutory concession is a relaxation which gives taxpayers a reduction in tax liability to which they would not be entitled under the strict letter of the law. Most concessions are made to deal with what are, on the whole, minor or transitory anomalies under the legislation and to meet cases of hardship at the margins of the code where a statutory remedy would be difficult to devise or would run to a length out of proportion to the intrinsic importance of the matter.\(^\text{35}\)

There is something rather uncomfortable about the use of extra-statutory concessions: the practice of not seeking to collect tax which is clearly due in terms of the primary legislation has peculiar status which is reflected by judicial unease with the practice, encapsulated by the statement of Walton J in 1979,\(^\text{36}\)

I, in company with many other judges before me, am totally unable to understand upon what basis the Inland Revenue Commissioners are entitled to make extra-statutory concessions. To take a very simple example (since

\(^{33}\) At 661.

\(^{34}\) [1990] BTC 107.

\(^{35}\) IR 1. Although the extent to which concessions are in fact limited to minor or transitory anomalies was questioned in *R (on the application of Wilkinson) v IRC* [2002] BTC 97 at para 27.

\(^{36}\) *Vestey and Others v IRC (No 2)* approved of by Lord Wilberforce in the House of Lords [1979] 3 W.L.R. 915, 926, 931.
example is clearly called for), upon what basis have the commissioners taken it upon themselves to provide that income tax is not to be charged upon a miner’s free coal and allowances in lieu thereof? That this should be the law is doubtless quite correct: I am not arguing the merits, or even suggesting that some other result, as a matter of equity, should be reached. But this, surely, ought to be a matter for Parliament, and not the commissioners. If this kind of concession can be made, where does it stop; and why are some groups favoured as against others? I am not alone in failing to understand how any such concessions can properly be made. 37

He added, “One should be taxed by law and not be untaxed by concession.” 38

However, despite the approval of the above sentiments in the House of Lords, this took place prior to the decisions in National Federation and Preston, and by 1987, McNeill J was of the view that extra-statutory concessions fell well within the “concept of good management or of administrative common sense” and to be “well within the proper exercise of managerial discretion”. 39 In 1989, Lord Justice Bingham was able to say, “no doubt a statement formally published by the Inland Revenue to the world might safely be regarded as binding, subject to its terms, in any case falling clearly within them.” 40

It now appears to be accepted that extra-statutory concessions are legitimately issued and their scope and application are appropriately considered in individual cases by the courts, although judicial statements continue to be grudging:

One of the problems of concessions is that they can lead to documents such as this certificate which is and is known by all concerned to be inaccurate. ... It is a pity that the trenchant aphorism of Walton J in Vestey v IR Commrs [1979] 1 Ch 177 at p. 197: ‘One should be taxed by law, and not be untaxed by concession’ has not been heeded. Concessions lead not only to artificiality and false documentation but also to arguments whether particular transactions fall within them. The language of concession is not that of a statute and should not be construed as if it was.

The judge though then continued,

But if a concession is published to all who might benefit from it, they are entitled to arrange their affairs in reliance on it, provided that what they do falls clearly within the terms of the concession. 41

This is not an entirely accurate statement of the current position because before the concession can bind the tax authorities, it must have been issued in the course of the exercise of their powers of care and management. The cases in which concessions have been considered have all proceeded on some rather vague notion of their relationship with the care and management function but in R (on the application of

38 At 197.
39 R v HMIT ex parte Fulford Dobson [1987] BTC 158 at 166.
40 MFK Underwriting Agencies Ltd op cit note 22 at 581.
41 per Collins J in R v C & E Commrs ex parte Greenwich Property Ltd [2001] BTC 5158 at 5163. See also Moses J in R (on the application of Wilkinson) v IRC op cit note 35 at para 27.
Wilkinson) v IRC\textsuperscript{42}, careful judicial consideration of the constitutional basis of such concessions is apparent. One of the issues in this case was whether the Inland Revenue should have granted a concession in order to make a statutory relief (available to women only) available to men too so as to achieve compatibility with rights provided for by the ECHR. The Court of Appeal held that the Inland Revenue had no power to grant the concession to override an unequivocal legislative provision except for the purposes of facilitating the overall task of collecting taxes as part of its duty of “care and management”.

No doubt, when interpreting tax legislation, it is open to the commissioners to be as purposive as the most pro-active judge in attempting to ensure that effect is given to the intention of Parliament and that anomalies and injustices are avoided. But in the light of the authorities that we have cited above and of fundamental constitutional principle we do not see how s. 1 of TMA 1970 can authorise the commissioners to announce that they will deliberately refrain from collecting taxes that Parliament has unequivocally decreed shall be paid, not because this will facilitate the overall task of collecting taxes, but because the commissioners take the view that it is objectionable that the taxpayer should have to pay the taxes in question.\textsuperscript{43}

So, the power to grant concessions is not without limit but must be exercised only for the purposes of facilitating the task of tax collection. Given that concessions by definition reduce the amount of tax collected, under this test there is only one obvious justification for a concession: where the costs of collection outweigh the tax at stake. On this basis, many concessions are hard to justify.

Further limitations to the powers of the tax authorities are considered in the most important case in recent years on the ultra vires doctrine in the context of taxation, recently decided by the Court of Session in Scotland\textsuperscript{44}. The case concerns a “forward tax agreement” entered into between the UK tax authorities and Mohammed Al Fayed. The tax position of a non-UK domiciliary resident in the UK in relation to foreign source income and gains is that they are only taxable to the extent that they are remitted into the UK. This means that a wealthy and well-advised individual could avoid UK tax on foreign income and gains by arranging for only capital (and not capital gains) to be remitted to the UK. A handful of agreements (“forward tax agreements”) had been entered into between the tax authorities and non-UK domiciled taxpayers under which lump sums were paid to the Inland Revenue each year in lieu of an assessment made on the basis of the actual income and gains (if any) remitted. Several successive agreements had been entered into with Mr Al Fayed, the last intended to last from 1997 to 2003, to the effect that he would pay a certain amount of “tax” each year and, in return, the tax authorities would effectively stay away from his affairs. On the basis of information which subsequently became public, the Inland Revenue decided that it had entered into these agreements on the basis of inadequate information and took a decision in 2000 to resile as to the future from the 1997 agreement on the basis that it was ultra vires.

Al Fayed argued that the agreement was not ultra vires, (and that even if it was, to resile from it was unfair and a breach of his legitimate expectation, discussed below).

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{42} Supra.
\item \textsuperscript{43} At para 46.
\item \textsuperscript{44} Op cit note 19. The petitioner has appealed to the House of Lords.
\end{itemize}
\end{footnotesize}
The Inland Revenue had initially argued that, although in general they had the power to enter into forward tax agreements, this particular one was ultra vires. This was on the basis that it provided that the taxpayers were to be treated as domiciled outside the UK, whatever the true position, but contained no provisions for termination in the event of a change of circumstance and was entered into on the basis of insufficient information. However, in the lower court it had been decided that all forward tax agreements were ultra vires and this was the principal line taken on appeal. So far at least (the case is under appeal to the House of Lords), the courts have backed the Inland Revenue.

The taxpayer had sought to make an analogy with “back tax agreements”, the practice whereby tax authorities negotiate a settlement with the taxpayer in relation to periods already ended and the “amnesty” entered into in the National Federation case. On the basis that it was legitimate to contract to accept an amount which might not be precisely equivalent to the actual tax due in relation to past periods, it was argued that the tax authorities should be permitted to enter into similar agreements in respect of future periods. However, the court distinguished these agreements on the basis that the statutory duty of the tax authorities is to collect “tax as it falls due in respect of actual transactions”. Although the managerial discretion to enter into a compromise in respect of past transactions in the circumstances of each case was recognised as falling within the duties and powers of the Inland Revenue, they did not have to power to collect tax in the future. Therefore, neither did they have power to enter into an agreement in relation to tax which might or might not become due in the future.

Fundamentally, the decision boils down to this: making a deal in relation to a transaction already carried out in light of all the available knowledge means that the Revenue can assess with reasonable accuracy what facts they are going to be able to establish, where they will have difficulties and what amount of tax they believe might be at stake. An informed judgment can be made on the balance between expenditure on further enquiries versus potential tax collection. In relation to a future tax agreement, there is no way of judging whether the deal is economic or not: they do not know how much tax they are forgiving, circumstances might change (such as might effect a change in domicile) or the laws might change. It is unusual for the courts to second-guess the tax authorities as to the way in which to maximise the tax take and one might have thought that the best judge as to the course of action to generate the most revenue would be the Revenue themselves. However, and this is a point made most clearly by the lower court, the Revenue’s powers of care and management must be considered in the context of their duty to collect tax. They have no duty to maximise Treasury income from any source.

Of course there is a distinction between a deal on a transaction yet to be done and one on a future transaction. In the first there is a question of balancing resources: time and effort spent chasing tax against the likely return. Where the transaction has yet to be carried out (and may not be carried out, depending on the tax position), there is

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46 By this stage, the Inland Revenue had terminated all seven other tax agreements remaining.
48 Para 73.
49 Para 76.
another factor in the equation: the balance between some tax and no tax. In a narrow sense, the agreement maximises the return to the Treasury. The deal is as follows: a taxpayer, contemplating a transaction (A), says to the Revenue, “If you tax A in full, it is not worthwhile me carrying it out. I will not engage in the transaction and you get no tax. However, if you agree to take a lower sum, we both win.” Expressed like this, one can see why such agreements cannot be permitted: they subvert the tax system by attributing different tax consequence from those which are intended by parliament and they give particular taxpayers preferential treatment.

**Legitimate expectation – the reliance cases**

There are a number of different situations in which a taxpayer may seek to rely on statements by the tax authorities. The statement may be about the authority’s interpretation of a particular rule, as to the amount of tax due, or their intention to take no further proceedings. The statement may be made to a specific taxpayer, either at a preliminary stage in response to a request for a clearance by the taxpayer or much later, in the context of settling a dispute, or may be contained in a published document setting out the tax authorities’ interpretation of a particular area of law. Included also under this heading are those situations where the tax authorities may be implied to be bound as to the future by past actions.

The fairness issue usually raised in the reliance cases is that of “legitimate expectation”, a relatively recent development in administrative law where it first emerged in the context of procedural fairness and the expectation of being heard.\(^{50}\) It was indeed in a tax case, *R v IRC ex parte Preston*,\(^ {51}\) that it was firmly established that the principle applied not only to expectations as to procedural fairness but also to the substance: the body could be held to its previous statements. *Preston* involved a taxpayer who, on the point of an investigation by the Inland Revenue, offered to abandon various claims for relief on the basis that this would “facilitate the agreement” of his tax affairs. Various questions were asked of him, which he answered (with, as it turned out, a lack of complete candour), with the result that the investigations were closed. Subsequently further information came to light and the Inland Revenue returned to his tax affairs for those years.

The opinion of Lord Templeman in *Preston* reveals a broad notion of fairness regarding legitimate expectation as a ground in itself of fairness. He drew on the private law analogy of breach of contract,

> In principle I see no reason why the appellant should not be entitled to judicial review of a decision taken by the Commissioners if that decision is unfair to the appellant because the conduct of the Commissioners is equivalent to a breach of contract or a breach of representation. Such a decision falls within the ambit of an abuse of power for which in the present case judicial review is the sole remedy and an appropriate remedy.\(^ {52}\)

The treatment of legitimate expectation as an independent substantive ground marks a significant extension to the view of Woolf J in the lower courts, who thought that a prior statement or agreement not to proceed was merely a relevant factor to be

\(^{50}\) *Re H.K* [1967] 2 QB 617, *Schmidt v Home Secretary* [1969] 2 Ch 149.

\(^{51}\) Op cit note 18.

\(^{52}\) At 219. The contract analogy is repeated in subsequent cases, including *MFK Underwriting Agencies Ltd* op cit note 22 and *R v IRC ex parte Matrix Securities Ltd* [1994] BTC 85.
weighed up in the event that the authority was considering whether to change its mind, rather than an independent ground. In other words, his view was that the existence of any expectation created was relevant and must be taken into account in any subsequent consideration of the case, but did not determine the outcome. This relegates a legitimate expectation to a relevant consideration, rather than being an independent constituent of the right to be treated fairly.

However, as it turned out in Preston, the taxpayer was not protected from further assessments on the facts, although the judgments oddly never spelt out precisely why. It might be that the case should be viewed as a “cards face-up” situation, although the actual term had not at that stage emerged. There is though a narrower alternative basis, for which there is authority in Lord Scarman’s judgment. This does not involve wider issues such as fairness but is based simply on the terms of the agreement with the taxpayer:

It was the appellant’s case that upon the true construction of the correspondence … the Commissioners purported to contract or to represent that they would not thereafter reopen the tax assessments of the appellant for the years 1974–75 and 1975–76 if he withdrew his claims for interest relief and capital loss. Had he made good this case, I do not doubt that he would have been entitled to relief by way of judicial review for unfairness amounting to abuse of the power to initiate action under Pt. XVII of the Act of 1970. But he failed upon the construction of the correspondence as my noble and learned friend demonstrates in his speech…

In other words, this uses traditional contractual analysis to find that the agreement contains an implied term that it should apply to the tax affairs of the individual on the basis of the disclosed information only. Under this analysis, the Revenue are not seeking to change their position and so there can be no question as to whether such a change would be fair.

The courts have had to return to arguments based on reliance on several occasions since Preston and in all bar two have the taxpayers failed although in all have the general principle of reliance and the duty of disclosure on the taxpayer been reiterated. In MFK Underwriting Agencies Ltd, the taxpayers claimed reliance on representations made by a number of officials of the Board of Inland Revenue as to the tax treatment of a particular return from investment. It was judged that the statements that the Inland Revenue had made were within their managerial discretion. Again, as it turned out on the facts, the representations were not regarded as sufficiently specific or unqualified as to bind the authorities. It is worth quoting from Bingham L.J’s judgment at length,

Every ordinarily sophisticated taxpayer knows that the Revenue is a tax-collecting agency, not a tax-imposing authority. The taxpayer’s only

53 Supra. Discussed below at text to note 59.
54 At 224.
55 See the discussion on this point in Hinds “Estopping the taxman” 1991 BTR 191.
56 The taxpayers were successful in Unilever op cit note 21 and R v IRC v Greenwich Property Ltd [2001] BTC 5158. They were also successful in R v IRC ex parte Kay op cit note 19. Although this last case contains references to legitimate expectation, it is probably more closely allied with the strict ultra vires rule, discussed below.
57 R v Board of Inland Revenue ex parte MFK Underwriting Agencies Ltd op cit note 22.
legitimate expectation is, prima facie, that he will be taxed according to statute, not concession or a wrong view of the law. …No doubt a statement formally published by the Inland Revenue to the world might safely be regarded as binding, subject to its terms, in any case falling clearly within them. But where the approach to the Revenue is of a less formal nature a more detailed enquiry is in my view necessary. If it is to be successfully said that as a result of such an approach the Inland Revenue has agreed to forego, or has represented that it will forego, tax which might arguably be payable on a proper construction of the relevant legislation it would in my judgment be ordinarily necessary for the taxpayer to show that certain conditions had been fulfilled. I say ‘ordinarily’ to allow for the exceptional case where different rules might be appropriate, but the necessity in my view exists here. First, it is necessary that the taxpayer should have put all his cards face upwards on the table. This means that he must give full details of the specific transaction on which he seeks the Revenue’s ruling, unless it is the same as an earlier transaction on which a ruling has already been given. It means that he must indicate to the Revenue the ruling sought. It is one thing to ask an official of the Revenue whether he shares the taxpayer’s view of a legislative provision, quite another to ask whether the Revenue will forego any claim to tax on any other basis. It means that the taxpayer must make plain that a fully considered ruling is sought. It means, I think, that the taxpayer should indicate the use he intends to make of any ruling given. This is not because the Revenue would wish to favour one class of taxpayers at the expense of another but because knowledge that a ruling is to be publicised in a large and important market could affect the person by whom and the level at which a problem is considered and, indeed, whether it is appropriate to give a ruling at all.

Secondly, it is necessary that the ruling or statement relied upon should be clear, unambiguous and devoid of relevant qualification.

In so stating these requirements I do not, I hope, diminish or emasculate the valuable developing doctrine of legitimate expectation. If a public authority so conducts itself as to create a legitimate expectation that a certain course will be followed it would often be unfair if the authority were permitted to follow a different course to the detriment of one who entertained the expectation, particularly if he acted on it. If in private law a body would be in breach of contract in so acting or estopped from so acting a public authority should generally be in no better position. The doctrine of legitimate expectation is rooted in fairness. But fairness is not a one-way street. It imports the notion of equitableness, of fair and open dealing, to which the authority is as much entitled as the citizen. The Revenue’s discretion, while it exists, is limited. 58

The laying of the cards on the table by the taxpayer was a theme picked up by the House of Lords in the subsequent case of Matrix Securities. 59 Here, the taxpayers sought and were granted a clearance in relation to a tax avoidance scheme. Whilst they revealed the factual basis of the scheme, they did not point out that it was an avoidance scheme or how it was supposed to work. They sought clearance from the local inspector rather than the specialist division, and there was considerable evidence that they knew that the specialist division would be unlikely to grant the clearance.

58 per Bingham LJ at 581, echoing Lord Oliver in R v AG ex parte Imperial Chemical Industries plc [1986] BTC 8015 at p 8046.

59 R v IRC ex parte Matrix Securities Ltd op cit note 52.
The taxpayers failed on two grounds: one, on the basis that although sufficient information to enable inferences to be drawn was disclosed, this may not amount to full disclosure; two, that the taxpayers knew or should have known that clearances for such schemes should have been sent to the technical division, and that by applying to the local inspector, they were falling short of their obligation of acting fairly.

The success rate of the taxpayers in the reliance cases has been limited and the taxpayers have generally failed either because they could not show that they fell within the terms of the statement or the statement was not in sufficiently clear terms as to create an expectation that it could be relied upon. The courts have held the tax authorities to their statements on the basis of legitimate expectation of the taxpayer in only two cases. The first, Greenwich Property Ltd, is a fairly straightforward application of a concession to the facts. A statement had been published which, by concession, treated a particular transaction as zero-rated for the purposes of VAT and the tax authorities were held bound by this even though the particular transaction entered into was not precisely the one contemplated by the concession whilst coming strictly within its terms.

The second case, R v IRC ex parte Unilever, is more interesting as the expectation derived not from published statement but from previous Inland Revenue practice. This pushes forward the boundaries of the principle as expounded in MFK Underwriting Agencies, where it was suggested that the rule applied only to clear, unambiguous and unqualified representations. The facts of Unilever were rather unusual. The statutory time limit for making loss relief claims is two years from the end of the accounting period of loss. Over a period of twenty years and in the context of at least thirty occasions, the Unilever group had submitted estimated figures which took into account loss relief without specifying the details. Tax was paid on this estimate with the final tax computations submitted at a later date (outwith the two year time limit) whereupon adjustments were made. One year, out of the blue, loss relief was refused by the Revenue on the basis that no relevant claim had been made in time.

In upholding the taxpayer’s claim that this was so unfair as to amount to an abuse of power, the judges were careful to stress the “literally exceptional” nature of the case. A strong factor in the decision is the “demonstrable pointlessness” of the strict application of the time limit for both parties. Although there was no statutory discretion to extend the loss relief time limit (this was added later) it was held that the power to do so was implicit in the care and management provision.

The case is also interesting for its observations by Simon Brown LJ on the extent of the principle of fairness, in which he sought to distance himself from the private law analogy with the concept of fairness in public law developed in MFK Underwriting Agencies and Matrix Securities.

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62 Op cit note 41.
63 Op cit note 21.
64 op cit note 22
65 ICTA 1988 s 393(11).
66 Per Simon Brown at 196.
Limits to legitimate expectation
Notwithstanding the importance that the courts have attached to the principle that statements by public bodies can be relied upon, the limits to this principle have recently been probed in two cases. In *F & I Services* the Court of Appeal recently considered the effect of the withdrawal of a VAT clearance for a voucher scheme which had an effect on a continuing basis on the taxpayer. The withdrawal was consequent upon a change in the view of the tax authorities as to the operation of the legislation and, although it was not sought to operate the change retrospectively, the taxpayer had incurred expense on the introduction of the scheme. The court was of the view that the taxpayer’s legitimate expectation was limited to past transactions only. Sedley LJ expressed forceful views on the ultra vires nature of a wrongful statement of the law by the tax authorities:

> In his written submission [the taxpayer] contended: ‘The mere fact that advice turns out to be wrong in law does not by itself entitle the Commissioners to go back on it’. I entirely disagree. There is nothing ‘mere’ about official advice which is wrong in law, at least if the taxpayer relies on it. It is of course serious for the taxpayer; but it is serious for the public and for the rule of law. It is the Bill of Rights 1688 – the nearest thing we have to a constitutional text – which abrogates the dispensing power of the Crown. The decision [in] *MFK Underwriting Agencies Ltd* … makes it absolutely clear that the law recognises no legitimate expectation that a public authority will act unlawfully. It is only where the expectation is of a particular exercise of managerial discretion that the court will begin to examine its legitimacy.

A bona fide change of legal opinion within the commissioners would also evidently have the same effect. One of the difficulties of this case is in reconciling the last sentence from the above quote with the suggestion by Robert Walker LJ that the taxpayer did have a legitimate expectation that he would not be asked to pay tax in relation to past transactions. As in *Al Fayed*, the tax authorities had not sought to recover tax retrospectively so the point was not considered in detail but the logic of these cases would suggest that an unlawful act should never form the basis of a legitimate expectation. Considerations of fairness might suggest that in a balancing operation, the disadvantage caused to the taxpayer might sometimes outweigh principles of lawfulness although a remedy in damages would do less damage to the legal principles involved.

The second case is *Al Fayed* which, as discussed earlier, decided that forward tax agreements were outside the powers of the Inland Revenue. The taxpayer argued, despite this, that in the interests of fairness the agreement should continue to be binding. The difficulty for the taxpayers was that there is ample authority for the

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68 Ibid at 5,283.
69 At 5282. The question of compensation payable by the tax authorities was mentioned in passing, although it was noted that the policy implications of such a step are immense and may require legislation. The possibility of compensation was also referred to in *Matrix Securities* op cit note 52.
70 Ibid at 5,282.
71 Indeed this is suggested in *F & I Services* op cit note 67 at para 72.
principle that no-one can legitimately expect a statutory body to act illegally.\textsuperscript{72} So, while the petitioners might have had an expectation, it was not legitimate.

The distinction between \textit{Al Fayed} and \textit{F & I Services} on the one hand and \textit{Unilever}, discussed above, on the other is the legitimacy of the decision relied upon. In \textit{Unilever}, the discretion to extend time limits beyond those provided for in statute was regarded as integral to the care and management function. As such, it was one which was within the Revenue’s powers to make and could form the basis of legitimate expectation. One must also though be able to explain why a decision as to the meaning of statute, made bona fide albeit wrong in law, is ultra vires whilst the deliberate decision not to apply time limits was perfectly legal. This must pivot on the reason for the actions in each case. One was made deliberately for reasons of administrative convenience and the other was just a plain mistake. Mistakes are evidently permitted as part of the care and management function.

\textbf{Equality}

The slippery principle of equality lurks behind many of the elements of our unwritten constitution. Thus the rule of law, which is the concept of general and abstract rules, applicable to all without favour, is but one expression of this principle. Of course under the UK constitutional system, there are limited opportunities for the judiciary to comment on the validity of our legislation, but the principle of equality might legitimately be brought to bear in the application of the legislation as part of the concept of fairness.

The general principle of equality or non-discrimination is probably today most associated with EU law,\textsuperscript{73} but it has received judicial support for many years, most notably in the judgment of Lord Scarman in the \textit{National Federation} case,

\textit{I am persuaded that the modern case law recognises a legal duty owed by the revenue to the general body of the taxpayers to treat taxpayers fairly; to use their discretionary powers so that, subject to the requirements of good management, discrimination between one group of taxpayers and another does not arise; to ensure that there are no favourites and no sacrificial victims.}\textsuperscript{74}

He concluded,

\textit{I am, therefore, of the opinion that a legal duty of fairness is owed by the revenue to the general body of taxpayers.}\textsuperscript{75}

Sir Thomas Bingham made the following general observations in \textit{Unilever},

\textit{It is to be remembered that what may seem fair treatment of one taxpayer may be unfair if other taxpayers similarly placed have been treated differently.}\textsuperscript{76}


\textsuperscript{73} The EU influence was recently identified in this context in \textit{C & E Commer v National Westminster Bank plc} [2003] BTC 5578 at 5592.

\textsuperscript{74} At 651.

\textsuperscript{75} At 652.

\textsuperscript{76} At 192. See also \textit{Al Fayed} para 102 (op cit note 19) for another statement of the general principle.
However, despite acknowledgment of the existence of the equality principle in court judgments, it has not yet succeeded in practice. It would only be in the most unusual of circumstances in which differential treatment as between similar taxpayers could be used as an argument by a taxpayer. In *R v C & E Commissioners v British Sky Broadcasting Group*77 there was no suggestion that mere inconsistency of treatment as between different tax offices would result in the breach of the duty to act fairly. In particular, the knowledge of the administrator at the time the decision is made is critical in determining whether any particular decision is unfair and a breach would only arise where the tax authorities had deliberately applied differential treatment, for example in order to provoke a test case.

**Locus standi**

Most negotiated settlements between taxpayers and the tax authorities do not come to the attention of the courts for obvious reasons: unless either party reneges on the agreement it is not in the interest of either to bring the matter forward. Obviously if one party, usually the tax authority, changes its mind, the taxpayer is likely to object, and most of the cases on legitimate expectation have come about in this way. There is another route though in which cases can be brought to the courts’ attention and this is where a third party argues that the deal is not legitimate in some way.

The main problem for third parties in taking such actions is the procedural requirement in judicial review cases for the applicant to show “sufficient interest” in seeking review.78 There have been relatively few instances of third party cases in the UK but it is reasonably clear that individuals other than those directly involved are not normally regarded as having sufficient interest to challenge the arrangements made between the taxpayer and tax authorities. The leading case here is *National Federation of Small Businesses*79. Up to and including the decision in the Court of Appeal, this case was decided entirely on whether the National Federation had standing to seek judicial review of the arrangement between the Fleet Street casuals and the tax authorities without reference to any arguments as to the fairness or otherwise of the arrangement. A characteristically colourful judgment by Lord Denning giving judgment for the majority in the Court of Appeal was of the view that it did have sufficient interest,

One thing I must say. If these self-employed and small shopkeepers cannot complain, there is no one else who can. The unlawful conduct of the revenue (assuming it is unlawful) will go without remedy. The revenue authorities will have obtained a dispensing power without it being authorised by Parliament. And that, by a defect in our procedure - because no one has a locus standi to complain.

Rather than grant the Revenue such a dispensing power, I would allow the whole body of taxpayers a locus standi to complain. Assuredly the Attorney-General will not complain on their behalf. He never does complain against a government department.80

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78 R.S.C. Ord. R 3(5).
79 Op cit note 18.
80 1980 QBD 407 at 424.
This was not a view shared by any of the five Lords who heard the appeal. Each was of the view that in the circumstances, the Federation had no locus standi. Curiously, most of the judgments regarded the locus standi decision as being intimately connected with the substantive issues. Lord Wilberforce expressed his views as follows:

There maybe simple cases in which it can be seen at the earliest stage that the person applying for judicial review has no interest at all ...; then it would be quite correct at the threshold to refuse him leave to apply. The right to do so is an important safeguard against the courts being flooded and public bodies harassed by irresponsible applications. But in other cases this will not be so. In these it will be necessary to consider the powers or the duties in law of those against whom the relief is asked, the position of the applicant in relation to those powers or duties, and to the breach of those said to have been committed. In other words, the question of sufficient interest can not, in such cases, be considered in the abstract, or as an isolated point: it must be taken together with the legal and factual context.\footnote{At 630.}

Lord Diplock\footnote{At 644.} appears to be of the view that the National Federation would have had locus standi had they established that the Inland Revenue had entered into agreement for improper reasons. Lord Scarman was also apparently of the same view.\footnote{At 654.} The difficulty with this approach is that it boils down to accepting that a third party has interest if he can succeed on the merits, but otherwise he does not.

Whilst none of the opinions were prepared entirely to shut the door on the possibility of a third party showing sufficient interest to challenge a decision by the tax authorities, it was clearly regarded as possible only in exceptional circumstances.\footnote{In a case of “sufficient gravity”: Lord Wilberforce at 633; “exceptionally grave or widespread illegality”: Lord Fraser at 647; where there is “grossly improper pressure or motive”: Lord Roskill at 662.}

This balance was expressed by Lord Fraser as follows,

\begin{quote}
All are agreed that a direct financial or legal interest is not now required … . There is also general agreement that a mere busybody does not have a sufficient interest. … The correct approach in such a case is, in my opinion, to look at the statute under which the duty arises and to see whether it gives any express or implied right to persons in the position of the applicant to complain of the alleged unlawful act or omission.\footnote{At 646.}
\end{quote}

The few other cases in which the issue of locus standi has been raised would tend to support the view that, in general, third parties will not be entitled to complain about the treatment of others.\footnote{If the taxpayer complains of the advantageous treatment of another, he risks failure on the lack of standing. One way to avoid this is to base the case on principles of equality, and argue that he should have been awarded similarly advantageous treatment, eg \textit{C & E Commissioners v National Westminster Bank plc} op cit note 77. This can only work where the taxpayer is in a similar position to the taxpayer who is receiving advantageous treatment.}

\footnote{\textit{(1969) 119 NLJ 1116.}}
evidently hoped, by requiring Customs to apply the strict letter of the law, to put their competitors out of business. More recently, in a case in which Freeserve, a UK internet service provider, was denied locus standi to challenge the tax treatment of an offshore competitor, Evans Lombe J referred to the “rule” that one taxpayer has no right to bring judicial review proceedings in relation to the tax affairs of another.88

The one case where standing was granted to a third party in a tax context was unusual in the extreme.89 ICI plc had sought review of the Inland Revenue’s determination of a transfer price of a gas for the purposes of oil producers. ICI, not being an oil producer, was not eligible for this treatment and was disadvantaged by what it (correctly) regarded as an erroneously fixed price. One critical aspect of the decision was that the complaint did not concern a specific assessment but a valuation, the effects of which would have continued for a period of time. Another aspect mentioned was that the act was complained of by ICI not as taxpayer, but as competitor, an argument which, as already noted, subsequently failed in Freeserve.

CONCLUSION

The cases reveal the existence of tensions between a number of competing interests. Most obviously there are the parties who are most immediately concerned in the resolution of the case: the individual taxpayer seeking fair treatment from a powerful state body and the tax authorities who, it might be argued, would prefer to exercise their statutory powers without interference from the judiciary. Less obviously, other individuals or groups have a stake in the outcome of these decisions. Each member of the taxpaying community is entitled to expect that he or she is being afforded equal treatment with their neighbours and is not being unduly burdened by the failure of others to pay their fair share. There are also the collective interests of the wider community to consider. For example, is the power wielded by the tax authorities consistent with their statutory powers because, if not, the executive may be acting without legitimacy? To this extent, the tax system may not reflect wider policy decisions such as distribution of the tax burden, taxation based on ability to pay, or the achievement of vertical and horizontal equity.

Looking first at the two parties immediately concerned, the courts have revealed themselves reasonably prepared to give protection to the taxpayers’ legitimate expectations by holding the revenue authorities to their statements in appropriate cases. By holding the authorities bound by concession, by past practice and perhaps even by wrongful statements of law, at least as to the past, they have rejected the argument that an expectation is only legitimate if the anticipated treatment offered is backed up by direct and specific legal authority.90 At the same time, the courts have sought to give the tax authorities wide scope to perform their duties as they see fit by interpreting their care and management powers in ways which provide a significant degree of autonomy in the fulfilment of their management function. In general there has been relatively little second guessing of particular decisions, and the courts have been reluctant to substitute their views for those of the tax authorities. There are many

89 R v AG ex parte Imperial Chemical Industries plc op cit note 72.
90 The main exception to this is F & J Services Ltd, op cit note 67.
references to the expertise present in the Revenue and a general judicial regard is evident for the way in which the tax authorities carry out their functions.91

However, where the courts have been required to delve a little more deeply, it appears that to the extent the tax authorities are vested with implied discretion to override the express requirements of statute, it may only be exercised in the course of their care and management of the tax system and in the context of their primary duty which is to collect tax. In particular here we must recall Wilkinson where it was held that there was no power to grant an extra-statutory concession in order to give effect to rights under the ECHR and F & I Services, where it was held that a decision not to collect tax on the basis of an error of law was ultra vires, in contrast to such decisions made as a result of policy. Even in Al Fayed where there is a reasonable argument that the agreement was made to maximise income, it was not made to maximise tax.

Pausing for a moment to make an assessment of the balance achieved between the respective interests of the tax authorities and the taxpayer, one would be likely to conclude that the courts have marshalled the boundary rather effectively. Clearly the tax authorities cannot be expected to collect every last penny due in all circumstances irrespective of whether it is economic or reasonable and some discretion has to be built into the process. On only two occasions have the courts been prepared to say that the tax authorities were acting outside their powers in entering into agreements and one of these was on the basis that they were effectively collecting tax which was not due, which seems a reasonable limitation on the tax authorities’ powers.92

And while taxpayers have largely found themselves able to rely on statements made by the tax authorities, it must be in the interests of fairness between the parties that they should be able to do so: they must come to the table with clean hands and, even should they fall within the scope of any general statement, they must show that they placed reliance on it. There are perhaps one or two cases where one might have had some sympathy with the losing taxpayer, for example in Matrix it appeared that not only is the taxpayer required to lay all his cards face up on the table, but he is also expected to explain the significance of the hand. However, in the round, the courts have given the tax authorities and the taxpayer the chance to do a deal and have imposed reasonable duties on each in the course of holding each side to it.

However, whilst scoring well on the management of the relationship between the two parties intimately concerned, it is argued that wider interests which might legitimately have a claim to be taken into account are faring less well.

The principle of equality between taxpayers has been mentioned on several occasions by the judiciary as a relevant consideration, but an examination of the decisions suggests that this has in practice not been an important factor. The interests of the small businesses in National Federation were overridden, as were the arguments of BSkyB94 that they had to pay VAT when none of their competitors did.

The evidence on locus standi, although limited in quantity, shows a reluctance on the part of the courts to recognise third party interest in the affairs of other taxpayers. Lord

91 Eg Unilever op cit note 21.
92 Al Fayed and Kay both op cit note 19.
93 Kay op cit.
94 Op cit note 77.
Denning, in the Court of Appeal, used the rating cases in support of his argument in favour of granting standing to the National Federation. He made the following observations,

The most instructive cases on this topic are those in which a ratepayer qualifies as a ‘person aggrieved.’ He has a sufficient standing to complain of an error in the valuation list whereby some other person has been rated too little. The complainant may be only one ratepayer out of the 21 million people in the area of Greater London. He may complain that a valuation is too little on the other side of London 20 miles away. He is a ‘person aggrieved’ even though he is not affected in his pocket in the slightest. Lord Wilberforce put it well when he said in Arsenal Football Club Ltd. v. Ende [1979] A.C. 1, 17:

‘Uniformity and fairness have always been proclaimed, and judicially approved, as standards by which to judge the validity of rates. Indeed I believe that many men feel a more acute sense of grievance if they think they are being treated unfairly in relation to their fellow ratepayers than they do about the actual payments they have to make. To produce a sense of justice is an important objective of taxation policy.’

But as we saw earlier, this decision was overturned by the House of Lords.

In section two, above; competing views of the source of the court’s authority were identified: majoritarianism and communitarianism. The first imports requirements of reasonableness through the doctrine of parliamentary sovereignty and ultra vires, the second through independently derived principles of justice and fairness. One of the purposes of this paper was to see what light, if any, the approach of the courts in tax cases sheds on this debate and it is time to consider this. It is a tricky endeavour for a number of reasons. First, direct evidence from the case reports is virtually impossible to find as this is not the kind of debate in which the judiciary, at least in the course of judicial decisions, generally engage. Second, there is a wide degree of coincidence behind the principles which inform judicial decision making irrespective as to which constitutional theory underpins judicial review. The rule of law for example may be the embodiment of formal legality but also clearly underpins broader considerations of fairness, equal treatment and the common good. Similarly, although under majoritarianism decisions are justified by reference to statute, equally such references would be expected under the communitarian theory of judicial decision making: judges do not operate in a vacuum, even if they may go beyond legislation to draw upon common law principles in appropriate cases. Principles of fairness in the abstract can also derive from either theory: whilst fairness is intrinsic to common law principles, it is not unreasonable to imply it into principles of statutory interpretation.

Whilst the task of identifying which theory is most appropriate may be difficult, if a review of all the cases in a fertile area for judicial review fails to provide some evidence one way or another, it suggests that these high-level theories have little bearing on the day-to day practice of the courts but are only of use in the apocalyptic case, for example whether legislation could ever be declared unlawful. At a theoretical

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95 At 145. It should be noted however that there is a potential distinction between the tax cases and the rates cases to be made here: the rates legislation provided a mechanism for a “person aggrieved” to appeal. There is no such equivalent in tax legislation, so the courts have no statutory steer that individuals outside the parties concerned should have standing to complain.
level this may be interesting but is not significant in the normal case of judicial review.

It is suggested that some evidence can be gleaned from the patterns of decision making in the cases considered above and, although the evidence is ambiguous, on balance it provides the majoritarian theory with most support.

The strongest argument in favour of the communitarian view lies in the courts’ recognition of extra statutory concessions as it is hard to explain such deliberate departure from the terms of the statute on the basis of implied authority within the statute. Arguments based on managerial discretion and legitimate expectation have prevailed over the narrow statutory approach but it is possible that these arguments themselves reflect an approach to decision making which is evidence of the majoritarianism. The tax authorities have been afforded perhaps a surprisingly wide degree of discretion, but this has largely been given through the application of the private law concepts of certainty, reliance and disclosure. In particular the fact that the taxpayer must be able to establish that they have acted in reliance upon published statements before they can rely on them comes very close to operating the rule of estoppel, in direct contrast to the public law rule that estoppel cannot be used against the Crown. There are several statements in the cases which link the content of the doctrine of legitimate expectation with breach of contract or misrepresentation and Preston is a clear example of the contractual approach. It is argued that the quasi-contractual approach, with its emphasis on the immediate interests of the parties involved, is evidence of a rejection of the communitarian view which would be more likely to place emphasis on the public interest and suggest more liberal rules on locus standi.

The quasi-contractual approach is consistent with the stress on managerial interest as a guiding principle for determining the limits of the authority’s powers. It protects the autonomy of the tax authorities rather than imbuing them with a duty to give deeper consideration of the public interest. The wide range of discretion attributed to the tax authorities by the words “care and management” and the limited use of the strict doctrine of ultra vires in the sense of Al Fayed reflects values of autonomy for the public authority and freedom from legal regulation rather than public law values of fairness, control of power and equality.
Tax Knowledge for Undergraduate Accounting Majors: Conceptual v. Technical

Lin Mei Tan and John Veal

Abstract

With the call in recent years for a change in accounting education to redirect the focus from being too technically oriented to more conceptually oriented and more skills based, this study examined the content coverage of first tax courses in New Zealand.

The survey results show that both educators and practitioners considered a higher level of conceptual understanding than technical proficiency is required in most taxation topics canvassed. A wide range of topics was covered but not to the extent that tax educators would like or the practitioners expected them to.

INTRODUCTION

Since the mid-1980s, numerous reports and articles concerning the inadequacies of the traditional accounting curriculum have been published. A recurring theme in these publications is that a curriculum which is too technically focused does not adequately prepare students to cope with the changing business environment and the evolving needs of the accounting profession. In addition, accounting graduates need to be familiar with and skilled in using modern technologies, and to be excellent communicators, problem solvers and critical thinkers in this challenging world (Allen, 1999/2000).

More recently, the International Federation of Accountants (IFAC) further stressed that an accounting program should prepare students to become professional accountants rather than accountants. In their view, it is imperative that,

the content of the program create a base upon which continued learning can be built. The development of both an understanding of underlying concepts and principles and of the ability to apply and adapt them in a variety of situations is essential to life long learning. A focus on memorization of rules and regulations and on the mere accumulation of knowledge is not the goal of learning to learn (1994, p.4).

This ‘learning to learn’ approach applies to taxation in the same way as to any other accounting subject. The introductory tax course has long been a compulsory element in accounting degrees and programmes in most tertiary institutions in New Zealand (NZ). Prior literature on tax education (see Rubin, 1989; Rhoades-Catanach, 2000)

*Lin Mei Tan is a Senior Lecturer in the School of Accountancy, Massey University, Palmerston North, New Zealand, and John Veal is a Principal Lecturer in the School of Accounting, Finance and Law, The Open Polytechnic of New Zealand, Lower Hutt, New Zealand.
indicates that there is wide consensus that even if accounting majors do not wish to become tax specialists, they still need a certain amount of tax knowledge to perform effectively as auditors, business consultants, and controllers or in any other roles. In fact, the ‘learning to learn’ approach in tax education appears even more compelling when one considers the continuously changing nature of tax law.

In the United States, the debate over the appropriateness of the tax curriculum started as early as the 1960s and numerous surveys (see Gray, 1965; Schwartz and Stout, 1987; Sage and Sage, 1993) were conducted to ascertain the tax course content. The findings generally revealed that the basic concepts of income, business deductions and property transactions were taught within the context of their effect on individuals. As a result, tax courses offered in undergraduate programs were criticised for being too limited in their exposure to the broad range of tax issues to provide an appropriate foundation. In addition, the heavy emphasis on the technical aspects of the subject was considered inadequate to meet the needs of a dynamic and changing profession. Since only a small minority of accounting majors pursues a career in taxation, students need to be exposed to business tax issues, tax planning and web based tax research tools in the introductory taxation course. In 1996, the American Institute of Certified Public Accountants (AICPA) published a tax curriculum model which specifies the content appropriate for the first tax course and provides a suggested time allocation for each topic. The model emphasises a breadth of topics rather than depth of coverage, so that students are exposed to many tax issues that enter into various aspects of businesses.

In contrast to the debate and research on the tax curriculum in the US, little has been written about the tax curriculum in NZ. Although in the past, some studies were carried out in the accounting curriculum for accounting undergraduates, few were in the area of taxation even though taxation has long been taught either as a separate subject or as a component of other subjects. The Institute of Chartered Accountants of NZ (ICANZ) has specified a set of learning outcomes for the compulsory taxation element, but they are guidelines only and are rather general. This allows the ICANZ approved tertiary educational institutions (ATEIs) the flexibility to develop their own tax curricula and use of appropriate teaching methods. The compulsory tax courses offered in different ATEIs may therefore vary in their coverage of tax issues, some in greater depth or breadth than others. The learning outcomes in terms of acquiring technical and non-technical skills may also differ between institutions. Consequently, the content of the tax program at a particular ATEI will largely depend on the tax educators’ perception of the level of conceptual knowledge and technical skills required.

With the call in recent years for the focus in accounting education to be redirected from being too technically oriented to being more conceptually oriented and skills based, we considered it appropriate to examine the content coverage of the first tax course by surveying the views of educators and practitioners. Our study ascertains the level of conceptual knowledge and technical ability required of the various tax topics

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1 The learning outcomes are: identify the various taxes and tax bases applicable in NZ; distinguish assessable from non-assessable income and deductible from non-deductible expenditure including an awareness of timing issues; determine taxation obligations relating to individuals, partnerships, trusts and companies, including company taxation liabilities with reference to dividend payments and imputation credits; demonstrate an awareness of the potential tax implication for a NZ entity operating in the global environment; demonstrate an awareness of tax as an instrument of fiscal policy.
in the compulsory tax course typically taken by students in an accounting degree programme. The first course in taxation merits special attention because for many students it will be the only tax course they will take during their undergraduate years. For those who intend to specialise in taxation, the content of the first tax course is also important because it establishes the foundation for future learning in this discipline. Further, as alluded to by O’Neil, Weber and Harris, (1999, p.600), ‘for tax education to be relevant to the practice of accounting, the content must be relevant to accounting practice.’ The views of practitioners and educators are therefore equally valuable. The findings of this study will provide some insights into the level of competency in tax knowledge required of an accounting graduate as perceived by educators and practitioners. The findings may also provide an indication as to whether there is any discrepancy between ‘what should be taught’ as viewed by practitioners, and ‘what is taught’ by tax educators.

The paper is organised in the following manner. The first section reviews the debate on tax education in countries such as the USA, the UK, Australia and NZ. The research method is then described followed by an analysis and discussion of the results. The last two sections present the conclusions, the limitations of the study and suggestions for future research, respectively.

**LITERATURE REVIEW**

**USA**

In the USA, tax education is recognised as a vital element of business and accounting education and, compared to most other countries, there is much more debate and research in the area of tax education. For instance, in the 1960s, Gray (1965) surveyed those institutions accredited by the American Association of Collegiate Schools of Business (AACSB) to ascertain the content of the first tax course. His results indicated that tax educators rank an understanding of the current provision of the tax law as most important, followed by history and philosophy of the income tax, tax ethics, economic aspects, researching tax problems and preparation of tax returns (p. 205). He also found that the first course in taxation is typically focused on personal income tax, but a more conceptual than technical approach was generally adopted. However, he argued that even if students were exposed to the conceptual ‘why’ of taxation, they would still receive only a partial or fragmented view of taxes impacting on business issues, if this was the only tax course they took. Following this study, the Committee on Income Tax Instruction of the American Accounting Association (AAA) issued a statement in 1969 emphasising the need for accounting and business students to not only understand the concepts of taxable income but also to appreciate the impact of taxes on business decision-making. Still disappointed that the tax curriculum had remained the same, years after Gray’s research and the AAA’s suggestions, Sommerfield (1975) and Skadden (1975, p.171) called for a re-examination of tax courses so that an appropriate tax education could be provided for all accounting students irrespective of whether they become future auditors, managers, or professional tax advisors.

Further studies conducted in the 1980s and 1990s (such as Schwartz and Stout, 1987; Sage and Sage, 1993) found that educators still tend to spend more time on individual taxation and much less time discussing corporate taxation than practitioners would prefer. Again, critics cautioned that a negative result of such a narrow focused curriculum is that throughout their academic careers, accounting graduates are led to
believe that taxation is a distinct, non-related function of financial accounting and other business disciplines. Consequently, students who do not take a second tax course may be unable to relate the broad concepts to other entities. Aware of these criticisms, the AICPA tax division task force developed the Model Tax Curriculum (MTC) for undergraduate and graduate courses. This model places greater emphasis on business taxes and tax planning. The curriculum introduces students to a broad range of tax concepts, types of taxpayers, and the role of taxation in business decision-making. The model further recommends that more emphasis be placed on the differences between financial and tax accounting and that tax research, planning and ethics be integrated into and emphasized throughout the program. The breadth of topics encompassed in the MTC requires that tax teachers limit the depth of coverage. However, instructors who traditionally covered all the rules and exceptions were left to decide what to eliminate to make room for the expansion of topics.

Since the MTC was developed and published in 1996, a survey of practitioners has been undertaken to assess their views on the model. The results indicate that practitioners strongly agree with the importance of both technical and non-technical skills. They believe that an understanding of both individual and corporate tax is vital. Further, the capability of using electronic tax research tools is seen by many as critical in a world of increasing electronic knowledge management (Kopplin, Porter, Sheriff, & Totten, 1999, p. 806). Practitioners further perceive that the best time for undergraduates to take their first tax course is during their junior year, as they need to have a fundamental understanding of how income tax influences business decisions and it would also provide an opportunity for interested students to pursue additional tax courses.

To determine the impact of the model curriculum, another survey was carried out by O’Neil et al., (1999) of tax teachers who taught at the AACBS-accredited institutions. Disappointingly, their results indicate that the first tax course is still dominated by technical information, focused on individual taxpayers (p.597) and taught using the traditional lecture supplemented by problem-solving. Despite such disappointing findings, there was some evidence that the model did have some impact on those who recently revised their tax course.

**United Kingdom**

Although the accounting curricula have been subject to debate and change over the years, little research is conducted on the teaching of taxation in the UK (Craner and Lymer, 1999). In particular, little was known about the course objectives and content, staffing, and teaching and assessment methods. Based on Craner and Lymers’ review, a study conducted by the Institute of Chartered Accountants in England and Wales (ICAEW) in 1995 indicated that there were major differences in the taxation course content offered by various universities. The dearth of prior research on tax education prompted them to conduct a survey of academics ‘to investigate the characteristics of taxation courses offered as part of the UK undergraduate accounting degrees in order to establish the existence or otherwise of common themes, structures and approaches’ (Craner and Lymer, 1999, p. 128). Their results revealed that most tax courses, unlike those in the US, were found to be optional rather than compulsory. In terms of course objectives, the ability to carry out detailed computations was considered as most important in a tax course. Other than this objective, their results indicate that there were no consistently held views as to what the objectives of a tax course should be (Craner and Lymer, 1999, p.142). There was also a strong bias in content towards
income tax and corporation tax and much less emphasis on indirect taxes, local taxes and social security taxes. This limited focus, as perceived by them, could be due partly to the absence of any constraint on course design resulting from the requirements of professional bodies.

Miller and Woods (2000) contributed to the UK tax education literature by examining whether there is an expectation gap between the taxation knowledge acquired by students at university and the tax knowledge which employers expect of them (p.223). Interestingly, their results showed that views differed depending on whether the educators are from ‘old’ (pre-1992) or ‘new’ (post-1992) universities (many were previously polytechnics). All groups ranked ‘an appreciation of the general scheme of the UK tax’ as the most important learning outcome. However, educators in the new universities ranked the ability to perform tax computations second in contrast to those educators from the old universities who ranked them eighth. It appears that such a focus is inevitable as these new tertiary institutions are partially influenced by the demands of the professional bodies’ examinations. Overall, the results indicate that differences exist between the old and new universities and also between employers’ current expectations of graduates’ tax abilities and employers’ preferences for tax abilities (p. 223).

**Australasia**

As in the UK, there has been little research carried out on tax education in Australia and New Zealand. In 1980, Flanagan and Juchau (1982) conducted a mail survey to ascertain the core of the curriculum for accounting undergraduates in Australia. The survey revealed overall support for inclusion of tax topics as one of the core elements; however, they generally received a low importance ranking from educators and practitioners (1982). In the 1990s, Abdolmohammadi, Novin and Christopher (1997) did a comparative study of education in Australia and the US and found that the emphasis placed on taxation in the accounting curriculum in both countries accounts for only about 9% of the total curriculum.

On accounting education in general, a review of the accounting discipline in higher education conducted in 1990 in Australia disclosed that undergraduate programs fail to meet their educational objectives. Accounting courses, according to the review, need to be more conceptual and less procedural, and more focused on innovative teaching. Hasseldine and Neale (1991) supported this proposition as their survey of Australia and NZ tertiary institutions indicated that tax education in Australasia tends to place greater emphasis on procedural aspects and tax planning. They criticised the lack of use of an interdisciplinary approach to conceptual tax teaching, which is seen as more appropriate for the first course in taxation.

In summary, there has been little comparative research carried out on the tax curriculum in New Zealand particularly when compared to the US. The present study attempts to fill this gap in knowledge by examining the content coverage of first tax courses taken by undergraduate accounting majors.

**RESEARCH METHODOLOGY**

**Sample**

The sample for this study was drawn from two main groups: accounting practitioners and accounting educators. Practitioners’ views were considered appropriate as they generally have a good idea of what level of knowledge, both conceptual and technical,
an entry level accounting graduate who intends to join a public accounting firm will need to possess. A random sample of 200 practitioners in public practice was therefore obtained from ICANZ. The sample was selected from practitioners in senior positions because they would have more years of experience in working with accounting graduates and would therefore be in a good position to ascertain the level of tax knowledge required of an entry level accountant.

Accounting teachers from ATEIs were segregated into two groups: one group which taught taxation (termed as tax educators) and the other group who did not teach taxation (termed as non-tax educators). A random sample of 100 non-tax educators and all 27 tax educators was surveyed. Non-tax educators were included in the sample as they generally have some concerns as to what forms part of an accounting curriculum, and the skills and knowledge that accounting students need to acquire from their tertiary education. They were therefore randomly selected from the Wiley Directory of Accounting 2001-2002. This list was updated, as far as possible, by checking with the list of teaching staff provided on each of the ATEI’s website. Tax educators were initially identified as those who indicated in the Wiley Directory that taxation was their primary teaching responsibility. This list was also updated, as far as possible, through contacts with academics from other ATEIs. A total of 27 educators who taught tax courses was identified and surveyed.

**Questionnaire design**

As a starting point, the tax course learning outcomes developed by the ICANZ was obtained. The guidelines are very general indeed as only an ‘awareness of taxation compliance within statutory and professional requirement’ is expected in the compulsory taxation course. The websites of the ATEIs were then searched to see whether any detail course syllabi were provided. Four syllabi were obtained, and together with the ICANZ guidelines, a list of course content was drawn up.

As prior literature suggests that both conceptual knowledge and technical ability are important, although at varying degrees, respondents were asked two separate questions. In the first question, respondents were asked to indicate for each of the identified topics (30 in total), the level of **conceptual knowledge** (1 = none to 5 = very high) an accounting graduate would need before entering an accounting career in public practice, regardless of what their eventual specialisation may be. In the second question, they were asked to indicate for each topic (28 in total), the level of **technical ability** (1 = none to 5 = very high) an accounting graduate would need before entering an accounting career in public practice regardless of their ultimate specialisation. The majority (but not all) of the topics in the two questions were similar. Respondents were also given the option, in both questions, of suggesting other topics.

The terms, **conceptual knowledge** and **technical ability** were adapted from the Flanagan and Juchau (1982) questionnaire. Respondents were informed that **conceptual knowledge** referred to ‘the mental processes ranging from simple recall or

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2 This is because some topics such as history of taxation, and principles and purpose of taxation have no ‘technical ability’ relevance and topics that involve computations have a ‘technical ability’ focus rather than conceptual.’

3 An analyses of the responses showed that majority did not indicate other topics.
awareness to creative thinking or evaluation.’ Technical ability was referred as the ‘skill in applying knowledge of tax law to specific taxation problems.’

Background information such as academic qualifications, professional affiliations, employment, and years of experience, was also obtained from respondents.

Two additional questions were included in the questionnaire for tax educators. Respondents who were course controllers or course co-ordinators of the compulsory tax courses were asked to indicate the level of conceptual knowledge and technical ability that was actually required in the tax course they taught. The purpose of this question was to find out whether there were any gaps between what practitioners perceived should be the required level of knowledge and what was actually covered in the tax curriculum.

The questionnaire was initially pilot tested and was shortened in response to comments that the length of the original questionnaire may deter some respondents from completing it. The final questionnaires, with a cover letter explaining the purpose of the survey, were then mailed out, followed by a reminder three weeks later.

Out of 200 questionnaires sent to practitioners, 93 were completed and 7 were returned undelivered, giving a usable response rate of 48%. For educators, 38 questionnaires were completed and returned, and 8 returned undelivered, giving a usable response rate of 32%. Out of the total number of educators’ responses, 11 were from tax educators and 27 were from non-tax educators.

RESULTS

Background
Table 1 shows that the practitioners’ primary areas of expertise were not mainly concentrated in one particular area, such as taxation. A large number also specialised in other areas like financial accounting, auditing, business planning and management accounting. Since respondents’ expertise is not mainly concentrated in taxation, the results obtained should not be biased by this one particular group.

In terms of work experience, there was also a good spread of practitioners, although the majority (68%) had been in practice for more than 5 years. These experienced respondents were therefore well positioned to identify the level of knowledge and ability required. The majority (90%) of the practitioners were partners in a firm rather than sole proprietors (10%). Most respondents (67%) had 3 partners in the firm and only 1 respondent was from a big firm.

On the basis of this spread of profiles and backgrounds, the findings of this study should be representative of the views of practitioners as to the level of tax knowledge and ability required of accounting graduates, in the current business environment.

Table 2 shows that a majority (89%) of the educators worked full time at a tertiary institution. Most educators (79%) also had more than 5 years of teaching experience. About 65% of educators were members of the ICANZ and about 86% hold a postgraduate qualification. For those who were not tax educators, their primary teaching areas were in financial accounting (54%), management accounting (46%), accounting information systems (12%) and auditing (12%). Twelve (46%) of the non-tax educators indicated that the paper they taught covered some elements of taxation.
### TABLE 1: BACKGROUND INFORMATION – PRACTITIONERS

<table>
<thead>
<tr>
<th>Areas of expertise*</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial accounting</td>
<td>61</td>
<td>66</td>
</tr>
<tr>
<td>Taxation</td>
<td>42</td>
<td>46</td>
</tr>
<tr>
<td>Auditing</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Business planning</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Managerial accounting</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No of years in practice**</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 or less</td>
<td>29</td>
<td>32</td>
</tr>
<tr>
<td>6-10</td>
<td>21</td>
<td>24</td>
</tr>
<tr>
<td>&gt;10</td>
<td>39</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No of owners**</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sole practitioners</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>Partners:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>not &gt; 2</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>59</td>
<td>67</td>
</tr>
<tr>
<td>4 – 9</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>70</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

* some respondents indicated more than one primary area of expertise

** 4 missing data

### TABLE 2: BACKGROUND INFORMATION – EDUCATORS

<table>
<thead>
<tr>
<th>Employment*</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full time at a tertiary institution</td>
<td>33</td>
<td>89</td>
</tr>
<tr>
<td>Part-time at a tertiary institution</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Also working in private sector</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Also working in public sector</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No of years teaching**</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not &gt; 5</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>6 - 10</td>
<td>9</td>
<td>26</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>18</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>100</td>
</tr>
</tbody>
</table>

* some respondents indicate more than one place of work

** 3 missing data
Out of the 11 tax educators, 10 (91%) indicated that only one tax course was compulsory in their tertiary institutions. These findings indicate that it is important that accounting students are exposed to the many issues in taxation that impact on businesses as this may be the only tax course they encounter in their undergraduate years.

**Conceptual knowledge and technical ability**

Table 3 shows the mean scores for the level of conceptual knowledge respondents think an accounting graduate would need before entering an accounting career in public practice. The mean scores for both practitioners and educators indicate that a higher level of conceptual knowledge on deductions, income, GST, depreciation, principles of taxation, tax losses and tax bases is required as compared to other topics. This is not surprising, considering that these topics cover the most fundamental or basic areas of taxation and that an understanding of GST is essential to many aspects of accounting practice. Farm taxation, gift duty and history of taxation had the lowest mean scores, indicating that both groups considered awareness only of these topics is required in the first tax course.

As compared to practitioners, the educators generally perceived that a higher level of conceptual knowledge is required of most topics (apart from trusts, property transactions, partnerships, farm taxation, gift duty, and history of taxation). Further statistical $t$ tests, however, revealed that, out of the 30 topics, there was one significant difference ($p<0.01$) between the practitioners’ and educators’ perception, and that was for ‘tax planning, avoidance and evasion.’ This result indicates that the educators considered that graduates need to have a higher level of conceptual knowledge in this topic. Practitioners perhaps did not consider conceptual knowledge of tax planning, avoidance and evasion to be very important for new graduates because not all of them will ultimately specialise in taxation. Educators, on the other hand, usually take a broader view as their role is to prepare students for a range of possible career options.4

A number of high-profile tax avoidance and fraud cases over recent years coupled with the call for integrating ethics into the accounting curriculum, have probably also contributed to the current interest in avoidance and evasion law. From the educator’s perspective, this topic could be regarded as an interesting and challenging area of teaching and learning! Further statistical tests showed that there were no significant differences in views between the non-tax educators and tax educators.

Table 3 also shows the mean scores of the level of technical ability required of an accounting graduate, as perceived by practitioners and educators. For both groups, the following topics achieved the highest mean scores: deductions, income, GST, depreciation, income tax computations for business entities and individuals. Again, this consensus seems reasonable as these are fundamental areas of taxation and GST is an important aspect of accounting practice. In contrast, for both groups, structure of tax legislation, foreign source income, farm taxation, tax investigation, dispute resolution and gift duty had the lowest mean scores.

Overall, for most topics (other than trusts, preparation of computer returns, and farm taxation), educators perceived that a higher level of technical ability is required of an

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4 Further, as indicated by a reviewer of this paper, educators may view that it is important for business advisors/accountants to be aware of the interaction of disciplines and the impact or tax/ethical implications advice can have.
accounting graduate as compared to practitioners. However, the views were not significantly different ($p<0.01$). Statistical tests also showed that there were no significant differences in views between non-tax and tax educators.

**TABLE 3: CONCEPTUAL KNOWLEDGE AND TECHNICAL ABILITY REQUIRED - MEAN SCORES**

<table>
<thead>
<tr>
<th>Topics</th>
<th>Conceptual Knowledge Mean Scores</th>
<th>Technical Ability Mean Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Educators</td>
<td>Practitioners</td>
</tr>
<tr>
<td>Deductions</td>
<td>4.11</td>
<td>4.08</td>
</tr>
<tr>
<td>Income</td>
<td>4.13</td>
<td>4.05</td>
</tr>
<tr>
<td>Goods and services tax</td>
<td>3.95</td>
<td>3.95</td>
</tr>
<tr>
<td>Depreciation</td>
<td>4.03</td>
<td>3.81</td>
</tr>
<tr>
<td>Principles of taxation</td>
<td>4.05</td>
<td>3.65</td>
</tr>
<tr>
<td>Tax losses</td>
<td>3.82</td>
<td>3.59</td>
</tr>
<tr>
<td>Tax bases</td>
<td>3.92</td>
<td>3.54</td>
</tr>
<tr>
<td>Accounting periods &amp; methods</td>
<td>3.65</td>
<td>3.53</td>
</tr>
<tr>
<td>Imputation system</td>
<td>3.68</td>
<td>3.52</td>
</tr>
<tr>
<td>Structure of direct &amp; indirect tax</td>
<td>3.82</td>
<td>3.51</td>
</tr>
<tr>
<td>Fringe benefit tax</td>
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<td>3.48</td>
</tr>
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<td>Assessments, payments &amp; appeals</td>
<td>3.61</td>
<td>3.42</td>
</tr>
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<td>Penalties structure</td>
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<td>3.42</td>
</tr>
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<td>3.40</td>
</tr>
<tr>
<td>Trusts</td>
<td>3.32</td>
<td>3.39</td>
</tr>
<tr>
<td>Tax planning, avoidance &amp; evasion *</td>
<td>4.05</td>
<td>3.38</td>
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<td>Structure of tax legislation</td>
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<td>3.37</td>
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<tr>
<td>Property transactions</td>
<td>3.05</td>
<td>3.35</td>
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<tr>
<td>Corporate distributions</td>
<td>3.50</td>
<td>3.34</td>
</tr>
<tr>
<td>Partnerships</td>
<td>3.24</td>
<td>3.33</td>
</tr>
<tr>
<td>Qualifying companies</td>
<td>3.53</td>
<td>3.28</td>
</tr>
<tr>
<td>Corporate tax losses</td>
<td>3.50</td>
<td>3.25</td>
</tr>
<tr>
<td>Purpose of taxation</td>
<td>3.52</td>
<td>3.04</td>
</tr>
<tr>
<td>Residency</td>
<td>3.19</td>
<td>3.04</td>
</tr>
<tr>
<td>Tax investigation, dispute resolution</td>
<td>3.35</td>
<td>2.90</td>
</tr>
<tr>
<td>Foreign source income</td>
<td>3.18</td>
<td>2.89</td>
</tr>
<tr>
<td>Farm taxation</td>
<td>2.66</td>
<td>2.75</td>
</tr>
<tr>
<td>Gift duty</td>
<td>2.69</td>
<td>2.71</td>
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<tr>
<td>History of taxation</td>
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<td>2.27</td>
</tr>
<tr>
<td>Inc tax computations for bus entities</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Inc tax computations for individuals</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Preparation of computer tax returns</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

1 = none  5 = very high  
n/a indicates not applicable, as some questions were not asked either in the conceptual part or the technical ability part of the questionnaire.  
* significant at $p<0.01$

---

5 An analysis of variance (ANOVA) was carried out to examine the effects of size of organisation, number of year’s experience and area of expertise on practitioners’ perceptions of conceptual knowledge and technical ability needed. Number of year’s experience had no effect on their perceptions whereas size of organisation and area of expertise have an effect on only 2 to 3 topics respectively.
Conceptual v Technical

By comparing the mean scores of the level of conceptual knowledge required and the level of technical ability required for each topic, it can be seen that practitioners and educators generally perceived that a higher level of conceptual knowledge is required than technical ability. For all topics, other than farm taxation, practitioners considered that a higher level of conceptual knowledge than technical ability is required of graduates. Similarly, for all topics other than GST, imputation system, partnerships and residency, educators rated conceptual knowledge higher than technical ability.

Tax educators’ course requirements and practitioners’ expectations

To ascertain the level of knowledge and ability that was covered in the compulsory tax courses, tax educators who were course coordinators or controllers were asked to respond to some additional questions. Out of the 11 tax educators, only 6 were the course coordinator or controller of a compulsory tax course.

Table 4 compares the expectations of practitioners with respect to conceptual knowledge and technical ability with what was actually covered by educators in the tax courses. For both groups, the three topics that achieved the highest mean scores were deductions, income and GST. These topics were covered by tax educators to about the same level of conceptual knowledge expected by practitioners. However, the conceptual knowledge required in 20 out of the 30 topics was lower than the expectations of practitioners. The widest expectation gap in conceptual knowledge appeared in three topics: accounting periods and methods, interrelationship between financial and tax accounting and trusts. The actual coverage of knowledge in the tax course was also lower when compared to the educators’ own perceptions of the required level of knowledge for most topics. Perhaps time is the main constraint for covering topics to the level tax educators would like to. No statistical tests were carried out for significance as the number of responses from tax educators was too small.

The results further show that the technical ability required by tax educators in 25 out of the 28 topics was lower than the expectations of practitioners. In particular, practitioners’ expectations of a reasonably high level of technical skills required in income tax computations, for individuals, accounting periods and methods, interrelationship between financial and tax accounting, assessments, payments and appeals, trusts, penalties structure, and trading stock were not matched with actual coverage in the tax course. On the lower end of the mean scores, gift duty and farm taxation were also covered to a much lesser degree than the practitioners expected. Tax educators’ actual coverage for each topic was also found to be lower that their own perceptions of the required level of technical ability. This indicates that the main reason for the expectation gap could again be due to the limited time available to cover the technical aspects of such topics further.

Further analysis of the mean scores for conceptual knowledge and technical ability shows that for all topics, tax educators required a higher level of conceptual knowledge than technical ability in the tax course (see Table 4). As practitioners and educators have in the past tended to place heavy emphasis on the technical or procedural aspects of taxation (Hasseldine and Neale, 1991), it is reassuring to find from this study that perceptions and attitudes have changed. The results also differ from some studies conducted overseas. In the USA for instance, the first tax course was found to be dominated by technical information and that the tax compliance
topics were mainly relevant to individual taxpayers only (O’Neil, Weber and Harris, 1999). In the UK, Craner and Lymer (1999) found that many tax courses were highly focused on student’s ability to carry out detailed computations.

### TABLE 4: CONCEPTUAL KNOWLEDGE AND TECHNICAL SKILLS: TAX EDUCATORS’ COVERAGE AND PRACTITIONERS’ EXPECTATIONS - MEAN SCORES

<table>
<thead>
<tr>
<th>Conceptual Knowledge</th>
<th>Tax Educators</th>
<th>Practitioners</th>
<th>Technical Ability</th>
<th>Tax Educators</th>
<th>Practitioners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods and services tax</td>
<td>4.17</td>
<td>3.95</td>
<td>3.33</td>
<td>3.86</td>
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</tr>
<tr>
<td>Income</td>
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<td>4.05</td>
<td>3.60</td>
<td>3.86</td>
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</tr>
<tr>
<td>Deductions</td>
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<td>4.08</td>
<td>3.60</td>
<td>3.90</td>
<td></td>
</tr>
<tr>
<td>Principles of taxation</td>
<td>3.83</td>
<td>3.65</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Residency</td>
<td>3.67</td>
<td>3.04</td>
<td>3.50</td>
<td>2.92</td>
<td></td>
</tr>
<tr>
<td>Corporate distributions</td>
<td>3.50</td>
<td>3.34</td>
<td>3.00</td>
<td>3.04</td>
<td></td>
</tr>
<tr>
<td>Corporate tax losses</td>
<td>3.50</td>
<td>3.25</td>
<td>3.00</td>
<td>2.95</td>
<td></td>
</tr>
<tr>
<td>Imputation system</td>
<td>3.50</td>
<td>3.53</td>
<td>3.00</td>
<td>3.32</td>
<td></td>
</tr>
<tr>
<td>Partnerships</td>
<td>3.50</td>
<td>3.33</td>
<td>2.33</td>
<td>3.17</td>
<td></td>
</tr>
<tr>
<td>Qualifying companies</td>
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<td>3.28</td>
<td>2.67</td>
<td>3.12</td>
<td></td>
</tr>
<tr>
<td>Tax bases</td>
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<td>3.52</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Tax losses</td>
<td>3.50</td>
<td>3.59</td>
<td>3.12</td>
<td>3.47</td>
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</tr>
<tr>
<td>Depreciation</td>
<td>3.33</td>
<td>3.81</td>
<td>2.83</td>
<td>3.75</td>
<td></td>
</tr>
<tr>
<td>Fringe benefit tax</td>
<td>3.33</td>
<td>3.48</td>
<td>2.69</td>
<td>3.41</td>
<td></td>
</tr>
<tr>
<td>Purpose of taxation</td>
<td>3.33</td>
<td>3.04</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Structure of tax legislation</td>
<td>3.33</td>
<td>3.37</td>
<td>2.83</td>
<td>2.90</td>
<td></td>
</tr>
<tr>
<td>Tax planning, avoidance &amp; evasion</td>
<td>3.33</td>
<td>3.38</td>
<td>3.00</td>
<td>2.91</td>
<td></td>
</tr>
<tr>
<td>Penalties structure</td>
<td>2.83</td>
<td>3.42</td>
<td>2.00</td>
<td>2.99</td>
<td></td>
</tr>
<tr>
<td>Property transactions</td>
<td>2.83</td>
<td>3.35</td>
<td>2.33</td>
<td>2.98</td>
<td></td>
</tr>
<tr>
<td>Structure of direct &amp; indirect tax</td>
<td>2.83</td>
<td>3.51</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Trading stock</td>
<td>2.83</td>
<td>3.40</td>
<td>2.17</td>
<td>3.30</td>
<td></td>
</tr>
<tr>
<td>Accounting periods &amp; methods</td>
<td>2.67</td>
<td>3.54</td>
<td>2.33</td>
<td>3.36</td>
<td></td>
</tr>
<tr>
<td>Foreign source income</td>
<td>2.67</td>
<td>2.89</td>
<td>2.33</td>
<td>2.85</td>
<td></td>
</tr>
<tr>
<td>Tax investigation, dispute resolution</td>
<td>2.67</td>
<td>2.90</td>
<td>2.00</td>
<td>2.57</td>
<td></td>
</tr>
<tr>
<td>Assessments, payments &amp; appeals</td>
<td>2.33</td>
<td>3.42</td>
<td>1.83</td>
<td>2.99</td>
<td></td>
</tr>
<tr>
<td>Interrelationship between fin &amp; tax a/c</td>
<td>2.33</td>
<td>3.48</td>
<td>1.67</td>
<td>3.34</td>
<td></td>
</tr>
<tr>
<td>Trusts</td>
<td>2.33</td>
<td>3.39</td>
<td>2.17</td>
<td>3.27</td>
<td></td>
</tr>
<tr>
<td>History of taxation</td>
<td>2.00</td>
<td>2.27</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Gift duty</td>
<td>1.67</td>
<td>2.71</td>
<td>1.33</td>
<td>2.48</td>
<td></td>
</tr>
<tr>
<td>Farm taxation</td>
<td>1.50</td>
<td>2.75</td>
<td>1.17</td>
<td>2.82</td>
<td></td>
</tr>
<tr>
<td>Income tax computations for business entities</td>
<td>n/a</td>
<td>n/a</td>
<td>3.17</td>
<td>3.68</td>
<td></td>
</tr>
<tr>
<td>Income tax computations for individuals</td>
<td>n/a</td>
<td>n/a</td>
<td>2.33</td>
<td>3.57</td>
<td></td>
</tr>
<tr>
<td>Preparation of computer tax returns</td>
<td>n/a</td>
<td>n/a</td>
<td>1.50</td>
<td>3.22</td>
<td></td>
</tr>
</tbody>
</table>

1 = none  5 = very high
n/a indicates not applicable, as some questions were not asked either in the conceptual part or the technical ability part of the questionnaire.
Tax courses and pedagogy

The teaching methods used to impart tax knowledge are as important as the course content. In particular, because skills enable graduates to learn to critique and use knowledge, skills development should be part of the process of imparting knowledge. To ascertain the instructional methods used, tax educators were asked further questions relating to teaching and assessment methods, and course revision.

TABLE 5: TAX COURSE AND TEACHING METHODS

<table>
<thead>
<tr>
<th>Teaching methods</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures</td>
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<td>45</td>
</tr>
<tr>
<td>Required reading eg textbooks</td>
<td>6</td>
<td>54</td>
</tr>
<tr>
<td>Case study analysis and discussion</td>
<td>4</td>
<td>36</td>
</tr>
<tr>
<td>Role-playing in decision situations</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Group research projects</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>Use of technology</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Workshops</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Self study materials</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Tutorials</td>
<td>5</td>
<td>45</td>
</tr>
<tr>
<td>Computer based learning</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment methods</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examinations</td>
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<td>54</td>
</tr>
<tr>
<td>Tests</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>Assignments</td>
<td>6</td>
<td>54</td>
</tr>
<tr>
<td>Research projects</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>Oral presentations</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Class participation</td>
<td>2</td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Content last revised</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>This year</td>
<td>4</td>
<td>36</td>
</tr>
<tr>
<td>Last year</td>
<td>2</td>
<td>18</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary motivation for revision</th>
<th>No.</th>
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</tr>
</thead>
<tbody>
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<td>ICANZ accreditation requirements</td>
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<td>18</td>
</tr>
<tr>
<td>Instructor motivated</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Increasing complexity of tax legislation</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Changes in tax legislation</td>
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<td>36</td>
</tr>
<tr>
<td>External/independent reviews</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>

As shown in Table 5, tax educators used a variety of teaching methods in their tax courses. All used at least 3 of the teaching methods indicated. However, the most common teaching methods used were lectures, required readings and tutorials. Some educators also used case studies to enhance students’ analytical skills. Overall, there appeared to be a combination of active and passive learning methods being used. Three respondents indicated that group work was required. Surprisingly, the use of technology was hardly exploited. Computer based learning was also not used by any of the respondents. Perhaps respondents had different interpretations of the term...
technology or computer based learning here. Overall it appeared that technology is hardly relied on as a teaching aid in the compulsory tax course. This result is consistent with the findings of Craner and Lymer (1999) in the UK but is very different from a survey conducted by O’Neil et al. (1999) in the US where a majority (55%) indicated the use of electronic tax research databases in their first tax course.

Tax educators also used a combination of assessment methods. Examinations and assignments were the most common methods used. Four respondents indicated that they revised their content this year and two indicated that they revised their content last year. Not surprisingly, the primary motivation for most tax educators to revise the course was changes in tax legislation. Some indicated other reasons such as the ICANZ accreditation requirements. Some are self motivated to change and some indicated that the external/independent reviews prompted the revision.

**CONCLUSION**

With only a general outline provided by the ICANZ of the learning outcomes for the taxation element, the degree of emphasis required both at the conceptual and technical level depends on the perceptions of the educators. For the program to remain relevant, the content and focus must also be geared towards the needs of students for careers in public accounting and other sectors. This critical objective, as alluded to by Novin and Fetyko (1997), will be achieved only if educators have a strong understanding of the needs of practitioners and other organisations.

This study however found that there were no significant differences in the views between educators and practitioners with respect to the level of conceptual knowledge (other than the tax planning topic) and technical ability required of any of the topics canvassed. This could be due to the fact that academics in NZ generally have closer interaction with their profession as compared to, for instance, academics in the US (Malthus and Laswad, 2002).

Further, both educators and practitioners indicated a higher level of conceptual understanding of most of the taxation topics, as compared to technical proficiency, is required. Students were also exposed to a wide range of topics in the first taxation course. This finding is in accord with the call for accounting education to be more conceptually based than technically or rule-based. However, they are in sharp contrast to the tax curriculum in the US and the UK which tend to have a more narrow focus and a heavier emphasis on performing tax computations.

The findings further indicate that, although tax educators exposed their students to a breadth of topics, they were not covered to the extent that they or practitioners would expect them to. In particular, exposure to topics such as the interrelationship between financial and tax accounting appeared limited in comparison to practitioners’ expectations. A good understanding of the relationship between financial and tax accounting is crucial for accounting students. This topic is also emphasised in the AICPA tax curriculum model. Tax educators, therefore, may need to reconsider the emphasis placed on this area and other related topics such as trading stock, accounting periods and methods, to enhance students’ understanding of their interrelationship with financial accounting. Tax educators also tend to place less time on exposing students to computerised tax returns. With time constrains, perhaps they perceived that this skill can be learned in the workplace.
Lastly, those tax educators who placed great emphasis on students’ development of various generic skills should be commended. The use of case studies, group learning, problem solving, written assignments and oral presentations by some is good evidence of such development. However, technology did not appear to be well exploited by tax educators. Greater exposure to technology such as the use of electronic tax research tools, or web-based learning in the first tax course, would certainly enhance students’ skills in ‘learning to learn’ in the field of taxation.

LIMITATIONS AND FUTURE RESEARCH

There are several limitations in this study. First, is that the results may not be representative of the general population as the number of respondents from the non tax educators was low. This could be due to their unfamiliarity with the technical tax terms used in the questionnaire and could have deterred some from responding. Future research may perhaps use less technical terms or focus on the expected learning outcomes rather than identifying the level of knowledge and technical ability for individual taxation topics.

In addition, this study only sought the perceptions of respondents with respect to level of knowledge and ability required of accounting graduates who intended to work in public practice. As a result, the findings may not be generalisable to other private and public sectors. Further research could be conducted to ascertain whether the expectations of employers from different sectors differ. The sample could also include graduates, as they could provide invaluable feedback on the usefulness of knowledge acquired in the first tax course at tertiary institutions.
REFERENCES


Competency of Malaysian Salaried Individuals in Relation to Tax Compliance under Self Assessment

Ern Chen Loo and Juan Keng Ho*

Abstract
Salaried individuals in Malaysia will commence to comply with the self assessment system when they file tax returns on income derived in the year 2004. However, under the self assessment regime, salaried individuals need to possess some fundamental tax knowledge to file appropriate returns. This study examines white collar salaried individuals’ tax knowledge, particularly in relation to chargeable income and exemptions as well as relief, rebates and tax credits that are generally available to individual taxpayers.

The findings reveal that a majority of those surveyed are not able to identify the correct year for which a given income should be chargeable and do not know of the chargeability or exemption of certain income. Besides the personal relief for self, relief for a wife and some relief for children, most do not know of the other relief, rebates and tax credits available, and are not aware of the options available in relation to joint assessment. Although the majority of the respondents had tertiary education, the findings also reveal that they do not possess adequate knowledge on matters pertaining to personal taxation. As such they may lack the competency to file appropriate tax returns under the self assessment system.

INTRODUCTION
Prior to the year of assessment 2001, income taxes in Malaysia were assessed under the Official Assessment System (OAS) whereby taxpayers were only required to file their annual tax returns following which the Inland Revenue Board (IRB) would carry out the assessments and issue the taxpayers with notices of assessment.

Commencing from the year of assessment 2001, the OAS was replaced in stages by the Self Assessment System (SAS). All companies commenced to comply with self-assessment effective from the year of assessment 2001, while self-assessment will be applicable to all salaried individuals commencing from the year of assessment 2004. Although in Malaysia income tax is assessed on the current year basis, but for individuals who derive income in a particular calendar year, the tax law stipulates that assessments need to be filed by 30 April of the following year. Thus for income derived in the calendar year 2004, assessments should be filed by 30th April 2005, whereby for the first time, salaried individuals will be required to file their tax returns under the self-assessment system.

This paper briefly reviews the literature on tax compliance issues in Malaysia, particularly in relation to personal taxation, the objectives of introducing self-assessment system.

* The authors are lecturers at the Faculty of Accountancy, MARA University of Technology, Malaysia.
We would like to express our gratitude and appreciation for the comments and suggestions offered by Dr Margaret McKerchar of the Australian Taxation Studies Program, Faculty of Law, UNSW, Sydney, who kindly reviewed an earlier draft of this paper.
assessment and salaried individuals’ knowledge in relation to chargeability to tax, exemption, joint and separate assessment for individuals as well as personal relief, rebates and tax credits that are generally available to individuals. This paper then discusses the objective, methodology and findings of the study.

REVIEW OF LITERATURE

Why from Official Assessment to Self Assessment?
One of the objectives for the implementation of the SAS is to improve voluntary compliance, as the rate of compliance under the OAS was unsatisfactory. Such observation is probably not unjustified, as it was reported that in 1997 (under the then OAS), out of a total of 2.6 million tax returns that were issued, the compliance rate of returns submitted was only 69.2% (Kasipillai et al, 1999).

Another objective for implementing the SAS is to lessen the burden of the Inland Revenue Board (Natrah et al, 2003), particularly in finalising assessments. Under the OAS, from 1990 to 1996 it was reported that approximately 20% to 30% of the annual tax returns were not finalised by the end of each of those years (Kasipillai, 1998).

Compliance Under Self Assessment System
Prior to the implementation of the SAS, taxpayers who had filed their tax returns through professional tax practitioners would have been exercising some form of de facto self assessment in the sense that their tax liabilities would had been worked out by the tax practitioners prior to the submission to the Inland Revenue Board. Thus under the SAS such taxpayers are unlikely to encounter difficulties in relation to appropriate compliance.

Appropriate compliance is taken to mean that one’s tax liability is correctly computed, after taking into account all factors that have a bearing on the tax liability, and that the person who prepares the tax returns is competent to comprehend the relevant tax laws, rules, regulations, guidelines and the IRB’s administrative procedures.

Some individuals who derived income from employment and from other non business sources such as dividend, rent, interest and royalty, might have filed their tax returns without professional advice. For these individuals, appropriate compliance can only be effectively realised if they are aware of and are competent to comprehend the relevant tax laws, IRB’s guidelines, rulings and administrative procedures. As it is, some taxpayers are found to be generally concerned about the uncertainty of the tax law and interpretation of IRB’s rulings (Sivamoorthy, 2003) and are normally at a loss to comply with tax laws (Nakha, 2002). Thus, to ensure appropriate compliance, some taxpayers under the SAS are compelled to solicit the services of professional tax practitioners.

Salaried Individuals’ Competency to Comply
Since the SAS presupposes that taxpayers will be honest, it would be reasonable to state that most of them are likely to comply to the best of their ability. A study by Kasipillai, et al (2003) revealed that taxpayers in Malaysia agreed on the need to comply, that violating tax law was certainly unethical, penalty should be imposed if returns were not filed within the stipulated period and that the majority would comply with income tax laws. However for taxpayers to understand their compliance obligations and to file their returns accurately, they need to be informed (Singh &
Bhupalan, 2001). Thus compliance under the SAS would place an onerous burden on taxpayers, particularly the burden of having to learn the tax laws (Natrah et al, 2003).

One of the factors that may influence the level of compliance by salaried individuals is functional literacy or illiteracy (Madi & Amrizah, 2003). Functional tax literacy is defined as the ability of a taxpayer to file tax returns and calculate his or her own tax liability independently and it encompasses the comprehension of some tax jargons and having basic tax knowledge on what constitute taxable income, allowable deductions, relief and rebates (Madi & Amrizah, 2003). Meanwhile functional tax illiteracy is defined as a situation where a person, who, with some basic knowledge in taxation, but as time goes by, becomes out of date and hence not able to determine his or her income tax liability independently (Barjoyai 1992).

In the early 1990’s, under the then OAS, although most individual taxpayers in Malaysia considered themselves to be tax literate, however it was found that more than 50% of them were “functionally illiterate” (Barjoyai, 1992). About a decade later, in Sarawak¹, Madi and Amrizah (2003) found that very few salaried taxpayers were able to demonstrate high tax literacy, and that the majority of them were not aware of the implementation of the SAS and still would prefer the IRB to assess their tax liabilities.

Kasipillai et al (1999) also found that although more than half of the individuals surveyed indicated that they were able to compute their own taxes, but nearly all of them were in favour of receiving more tax instructions from the IRB as the majority indicated that the income tax law was ambiguous and subjected to frequent changes.

**Academic Qualification and Tax Knowledge**

A study by Madi (1999) on sole proprietors and partners in Sarawak revealed that the level of taxpayers’ academic qualification was linearly and significantly associated with the level of tax knowledge, which is consistent with the contention that a low level of tax knowledge among taxpayers would not contribute to higher level of compliance (Natrah, et al, 2003). However, tax knowledge among secondary school teachers in Sarawak was found to be quite low (James, 1998). Even lecturers at a tertiary education institution in the Klang Valley² were found to be unaware of their obligations to file tax returns (Fazida, 1996) in spite of the fact that teachers and lecturers possess higher educational qualification. Observations by Siti (1996) indicated that individuals who were self-employed and who traditionally possess very low educational standards were ignorant of the tax law. On the contrary, factory workers in the Klang Valley, who generally possess lower educational qualification were found to have a relatively high level of tax knowledge in relation to allowable tax relief (Nor, 1996). Thus, it may be construed that those possessing higher academic qualification need not necessarily possess higher level of tax knowledge.

**Prepared for Self Assessment?**

Under the SAS, one of the objectives of the IRB is, as far as possible, to achieve voluntary compliance by the majority of the taxpayers (Kasipillai, 2002). In fact, it was found that taxpayers agreed on the need to voluntarily comply and disclose their

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¹ Sarawak is one of the states in the Federation of Malaysia.
² Klang Valley is the geographical area consisting of the Federal Capital of Kuala Lumpur, and the area approximately within a radius of 40 kilometer of Kuala Lumpur.
income (Kasipillai et al., 2003). Although it was found that there was a strong positive co-relationship between tax knowledge and the level of tax compliance (Kasipillai et al., 1999), however a study by Mottiakavandar et al. (2003) covering taxpayers in the northern states of Peninsular Malaysia revealed that the level of tax knowledge had no effect on their non-compliance behaviour. Instead, Mottiakavandar et al. (2003) found positive co-relationships between attitude towards one’s own compliance with attitudes towards other taxpayers’ compliance, effectiveness of the IRB and fairness of the tax system.

Experience of some other SA Regimes
The experience of some other self assessment regimes revealed that the change from the traditional to the self assessment system had lead to changes in the way tax authorities operate and the way taxpayers treat their tax obligations. Although a self assessment regime many have its benefits, which is debatable (Baldry, 1999), it appears to benefit the tax authority rather than the taxpayers, as self assessment relies on taxpayers having good understanding of the complex tax law, and the tax authority may profitably exploit tax law complexity (Hansford & McKerchar, 2004).

Under self assessment, one of the major factors that determines voluntary tax compliance rate is the understanding of the tax law. Unfortunately, the scope of taxation is wide, ambiguous and “… lies at the center of a very busy intersection, the intersection of law, accounting, economics, politics, globalisation and international competitiveness …” (Inglis, 2002, p. 69). Tax law would only be comprehensible if it is simple, unambiguous, and its interpretation is certain. Besides these features, appropriate tax administration’s policies and strategies, such as courteous and good public relations as practiced in Japan (Sarker, 2003) would go a long way in achieving higher compliance rates.

Under self assessment, taxpayers are burdened with the legal responsibilities of getting their assessments right. Experience in some self assessment regimes revealed that most taxpayers would likely turn to tax agents. In Australia, for instance, in 1977/78, 38% of personal taxpayers rely very heavily on tax agents to lodge their returns as compared to 75% in 1991 (Hansford & McKerchar, 2004), and 70% of the taxpayers still found the chores of submitting returns a sufficiently complicated and time consuming process (Baldry, 1999). In the United States that has a long history of self assessment, one out of every two taxpayers still relies on tax agents (Hansford & McKerchar, 2004). In the United Kingdom, a survey revealed that only 55% of the taxpayers were certain that they had neither overstated a deduction nor understated taxable income on their returns (Krause, 2000).

Personal Taxation
Under the Malaysian income tax law, an individual’s tax residence status has significant implications on his or her income tax liabilities. Income such as interest on savings and royalties derived from Malaysia by a resident individual shall, under specific circumstances, be either fully or partially exempted from tax. Prior to the year 2004, income derived from outside Malaysia and remitted to, and received in Malaysia by a resident individual were chargeable to income tax. With effect from the year 2004, such remittances are exempted from tax.

Resident individuals, subject to specific circumstances shall be allowed certain relief that will effectively reduce their respective chargeable income. Rebates that will effectively reduce an individual’s tax liability are also allowable, while tax credits are
available to those who derived taxable dividends from Malaysia. In the case of married couples, either of the spouses may opt for joint assessment, while in the event that both are silent regarding their option, separate assessment shall be applied.

**OBJECTIVE OF THE STUDY**

All individual taxpayers, deriving income from employment and, or from non business sources must comply with the self-assessment system in relation to income arising in and after the year 2004. Self assessed returns on income for 2004 should be filed with the IRB by 30 April 2005. In view of the impending implementation of self-assessment for salaried individuals, the objective of this study is to assess the tax knowledge and competency of salaried individuals who have been paying taxes on income derived in and prior to the year 2003, and who are likely to pay income taxes on income derived in and after the year 2004.

The focus of this study is only in relation to salaried individuals deriving income from employment and non-business sources. The individuals’ tax knowledge being examined is restricted to relief, rebates and tax credits that may be available to salaried individuals who are tax residents in Malaysia, as well as knowledge on joint and separate assessment, chargeability of income and exemptions.

**METHOD AND LIMITATIONS**

The data for this study were obtained through a questionnaire survey cum meetings with respondents. They survey cum meetings were conducted from the month of November 2003 to January 2004.

The purpose of the meetings was to clarify the objectives of the survey and explain the contents of the questionnaire. The respondents were particularly made aware that the objective was not to solicit information pertaining to the quantum of their income or tax liabilities, but what was being solicited is basically their understanding and knowledge pertaining to personal taxation.

The respondents are salaried white collar employees who hold middle and senior administrative positions in commerce and industries located in the State of Malacca and who are literate and deriving income from employment, and may also be deriving income from other non business sources. Individuals excluded from this study are those employed in the banking, finance and insurance industries as well as professionals employed in the accounting, tax, legal and corporate secretarial professions.

A total of 250 questionnaires were administered at random. Responses from all respondents were recorded, but only those who had paid income taxes in and prior to the year 2003 are included in this study. Those who have not paid any income tax are excluded on the assumption that these individuals would have no prior experience in personal tax matters. A total of 106 completed questionnaires are usable for analysis. The respondents are only those who exercised their employment in the vicinity of the

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3 The objective of excluding these groups of individuals is that by virtue of the nature of their occupations, they need to possess adequate tax knowledge.
commercial center of Melaka Raya\textsuperscript{4} in the State of Malacca. Since all respondents are employed and residing in Malaysia, they qualify as resident taxpayers.

Questions to test knowledge on joint and separate assessment, chargeability of income, exemptions, relief, rebates and tax credit are based on responses of either a (1) “YES”, (2) “NO” or (3) “NOT SURE” to each question in relation to these issues. Questions on relief for children are particularly in relation to the year 2003. In addition, three scenarios were designed to test the respondents’ knowledge on (1) the computation of tax chargeable using a given tax table that is applicable to individuals, (2) the chargeability to tax on income remitted to Malaysia and (3) the correct year for which income from bonus should be chargeable to tax.

Responses of either a (1) “YES”, (2) “NO” or (3) “NOT SURE” would be required to the questions posed in the first two scenarios. For the third scenario, respondents were requested to indicate the correct year for which income from bonus should be chargeable, or alternatively, to indicate that they either “DON’T KNOW” or “NOT SURE”.

FINDINGS

This section outlines the profile of the respondents, followed by the results of this study.

Profile Of Respondents

Table 1 presents the profile of the respondents. Slightly more than one-third are female while seven out of 10 are married and eight out of 10 who are married have children. Out of those who have children, most of their children are under the age of 18 years, while some are having children who are still in school, college or university. The highest single age group are those between the age of 31 to 40 years, and nearly eight out of 10 had tertiary education. With regards to their language proficiency to deal with their tax matters, more than 85% considered themselves to be sufficiently proficient in Malay\textsuperscript{5} and English while the remainder considered themselves to be proficient only in English.

Except for the language proficiency and age of respondents, all the other mentioned variables do have some bearings on the tax liabilities of an individual. Proficiency in Malay and English is a relevant factor for this study in the sense that in Malaysia the Income Tax Act and most taxation literature are in English while the income tax return forms are solely prepared in Malay. On the preparation of tax returns, about six out of 10 respondents prepared their own returns in the past while about 12.26% prepared their returns with the assistance of their respective spouses and another 11.32% sought the help of others.

Knowledge of Chargeability and Tax Chargeable.

Below are the three scenarios presented to test the respondents’ knowledge on (1) the computation of tax chargeable using a given tax table that is applicable to individuals\textsuperscript{6},

\textsuperscript{4} Melaka Raya is a major commercial center in the State of Malacca.

\textsuperscript{5} Malay is the official language of Malaysia.

\textsuperscript{6} A tax table (for the scale tax rate) has always been provided by the Inland Revenue Board together with the annual notices of tax returns sent to individual taxpayers.
(2) the chargeability to tax on income remitted to Malaysia and (3) the correct year for which income from bonus should be chargeable to tax.

Scenario One: “An individual has a chargeable income of RM70,000. Using the Tax Table provided, are you able to compute his or her tax chargeable?”

Scenario Two: “An individual derived income from outside Malaysia and later remitted the income to Malaysia in the year 2004. Is the income remitted to Malaysia taxable?”

Scenario Three: “In the year 2003, an individual received an income (e.g. bonus), being arrears for the year 2001. In which year should the income (i.e. bonus) be chargeable to tax?”

For Scenario One, the chargeable income of resident individuals are chargeable to tax based on a scale rate, ranging from zero to 28%. In this survey, a copy of the tax rate table was made available to the respondents together with the given hypothetical amount of chargeable income. Only 38.68% acknowledged that they know how to use the tax rate table to determine the hypothetical tax chargeable, while 33.96% acknowledged that they do not know how to compute the tax chargeable. The remaining 27.36% acknowledged that they are not sure of how to use the table.

Scenario Two is in relation to income derived from outside Malaysia and later to be remitted to Malaysia in the year 2004. Effective from the year of assessment 2004, such remittance is not taxable, and only 22.64% are aware of that. It is significant to note that 52.83% of those surveyed are not sure of whether such remittance is taxable or not, while the remaining 24.33% wrongly indicate that such remittance is taxable.

For Scenario Three, the correct response should be the year of assessment 2001. Only 42.45% are able to successfully identify the correct year of assessment for which a particular income (i.e. bonus) should be chargeable to tax while 41.51% fail to identify the year of assessment correctly and 16.04% are not sure of the correct year.

The findings in relation to some other chargeable and exempted income are reported in Table 2. Nearly eight out of 10 and seven out of 10 respectively know that rental and dividend income are chargeable to tax. As for interest (on savings of less than RM100,000), only about one third know that such interest are tax exempted, while the majority are not sure. The majority either do not know or are not sure that dividend received from cooperative societies and from approved unit trusts are exempted from tax.

Withholding Tax on Dividends and Tax Credits
In Malaysia, a company, when paying dividends (that are taxable) to its shareholders, has a statutory obligation to withhold tax at a rate applicable to that company and to

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7 The respondents were not requested to demonstrate their ability to use the Tax Table to determine the amount of tax chargeable. They only need to acknowledge that they either know, don’t now or not sure of how to use the table.
8 Similar remittance would have been chargeable to tax if remitted in or prior to the year 2003.
9 Interest derived by any resident individual on any deposit not exceeding RM100,000 in any savings or fixed deposit account with any bank or finance company in Malaysia is exempted from income tax.
10 Any dividend paid to unit holders by any unit trust approved by the Government or to members by any Co-operative Society registered in Malaysia is exempted from income tax.
remit the after tax dividends to the shareholders. The amount so withheld by the company shall be available as tax credits to the respective shareholders\textsuperscript{11}.

Although 68.87% of those surveyed know that dividends paid by banks and finance companies listed on the Kuala Lumpur Stock Exchange are taxable, only 54.71% know that such companies, upon paying dividends (that are taxable) had already deducted tax from the dividends, while 33.02% do not know of the tax deduction already made by the companies and 12.27% are not sure. Out of these 54.71% (n = 58), only 51.72% know that taxes deducted from the dividends are available to the shareholders as tax credits, 32.76% do not know and 15.52% are not sure.

Husband and Wife: Joint or Separate Assessment
Under certain circumstances, a married couple may exercise the option of having their respective income to be assessed jointly, either under the husband’s or wife’s name. However, in the event that they are silent about their option, separate assessment shall be applied.

Table 3 presents the findings in relation to joint and separate assessment. Among the married respondents (n = 75), only about one quarter know that the income of a husband or a wife shall be assessed separately (i.e. if they are silent about their option). In the case of opting for joint assessment, only 26.67% know that a wife can request for her income to be jointly assessed together with that of her husband while 29.33% know that a husband can request for his income to be jointly assessed with that of his wife.

In the event of a joint assessment, a husband or wife shall be entitled to a RM3,000 relief in relation to his or her spouse, and a further RM2,500 if the spouse is a disabled person. Two thirds of those surveyed know that a husband is eligible for the RM3,000 relief while only 13.33% know of the wife’s eligibility. In the case of the RM2,500 relief for disabled spouse, only 22.67% and 16.00% respectively know of the eligibility for the husband and the wife.

Relief and Rebates
Besides the relief in relation to a husband or wife, there are other relief available to resident individuals, of which the most common is the RM8,000 personal relief for oneself. About 70.75% of the respondents know of such a relief. Between about one-third and one-half know about the RM5,000 relief for a disabled taxpayer; the RM5,000 (maximum) relief for medical expenses incurred for parents; another relief of RM5,000 (maximum) for medical expenses incurred for oneself, one’s spouse or children who are suffering from serious disease and a further relief of RM5,000 (maximum) for contributions made to the Employee’s Provident Fund and payment of life insurance premium. Only a quarter or less know of the availability of the other relief as presented in Table 4.

Table 5 presents the findings in relation to tax rebates. Only slightly more than one third know of the rebate available to Muslim taxpayers for the amount of zakat\textsuperscript{12} paid; while about one fifth know of the RM400 rebate for the purchase of computer for

\textsuperscript{11} Under the Malaysian Income Tax Act, a company, when paying dividends, not out of exempt income account is required to deduct tax of 28% from the dividends, and to remit the after tax dividends to the shareholders.

\textsuperscript{12} Zakat is a mandatory religious tithes payable annually by Muslims.
personal use. Less than 10% know of the rebate for fees paid for foreign workers’ work permits and the rebate of RM350 if one’s chargeable income does not exceed RM35,000.

Relief in Relation to Children
As reported in Table 6, among the respondents who are married (n = 75), 80% of them (n = 60) have children. Out of those (n = 60) who have children, only 23.33% of them know that child relief in general is available only in relation to an unmarried child. However 83.33% and 78.33% respectively know that a child relief of RM800 shall be allowable if a taxpayer maintains a child who is under the age of 18 years or a child who is over the age of 18 years but still a full time student at pre-tertiary level. For a child who is a full time student at tertiary level in Malaysia, slightly more than one third know that a relief of RM3,200 is allowable, but in the case of a child whose full time tertiary education is outside Malaysia, only 8.33% know that the child relief allowable is RM1,600.

CONCLUSION
Taxpayers responding to this study are those exercising their employment in a major commercial center in the State of Malacca, with a majority of them having filed their own personal tax returns in the past years. Although a large majority of them had tertiary education, their tax knowledge pertaining to personal taxation as reflected in the findings may be considered to be relatively low, which is consistent with the findings of James (1998), but contrary to the findings of Madi (1999) and observations made by Siti (1996). With a relatively low knowledge on matters pertaining to personal taxation, these individuals may not be competent and ready to exercise appropriate compliance under the self assessment regime.

An appropriate compliance can only be realized when one’s tax liability is correctly computed, after taking into account all factors that have a bearing on the tax liability. An individual who exercises self assessment has to be competent to comprehend the income tax law and the Inland Revenue Board’s administrative procedures. Given the complexities, uncertainties and ambiguities of the tax law, rules and administrative procedures; taxpayers who are tax illiterate or inadequately informed may either be under-paying or over-paying taxes. To realise appropriate compliance, taxpayers need to be informed and their tax literacy level needs to be enhanced. In this context, since the Inland Revenue Board is entrusted with the statutory authority to administer income taxes in Malaysia, the onus is on the IRB to inform taxpayers and to provide adequate resources to meet the needs of enhancing tax literacy of taxpayers.

Although possession of adequate tax knowledge is essential for taxpayers to exercise appropriate compliance, the impact of the level of tax literacy on the degree of appropriate compliance is uncertain. In this respect, since one of the Inland Revenue Board’s objectives for the introduction of self assessment is to enhance the rate of

13 The data for this study were collected between November 2003 and January 2004. Thus the personal tax returns referred to are those filed in and prior to the year 2003, where the official assessment (or formal assessment) system for salaried individuals was still in operation.

14 In Malaysia, for salaried individuals, tax returns in relation to income for the year 2004 will have to be filed by 30 April 2005, where these individuals, for the first time will have to exercise self assessment.
the impact of tax literacy on the rate of appropriate compliance deserves the attention of the Inland Revenue Board and investigations by researchers.

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15 LHDN (i.e. The Inland Revenue Board of Malaysia) listed three objectives for adopting self-assessment, namely (1) to modernize and to coordinate tax administration, (2) to create a system that is more efficient and for a more timely collection of tax and (3) to enhance the rate of tax compliance.
### TABLE 1: PROFILE OF RESPONDENTS*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male 62.26 %</th>
<th>Not Married 29.25 %</th>
<th>Total 100.00 %</th>
<th>Female 37.74 %</th>
<th>Married 70.75 %</th>
<th>Total 100.00 %</th>
<th>Malay and English + 85.85 %</th>
<th>English only 14.15 %</th>
<th>Total 100.00 %</th>
</tr>
</thead>
<tbody>
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<td>Total 100.00 %</td>
</tr>
</tbody>
</table>

* The total number of respondents is 106.  
+ Malay is the official language of Malaysia

### Children*: Age and education

<table>
<thead>
<tr>
<th>Having children under the age of 18 years?</th>
<th>Yes 63.33 %</th>
<th>No 36.67 %</th>
<th>Total 100.00 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having children, age 18 years and above and still in school?</td>
<td>35.00 %</td>
<td>65.00 %</td>
<td>100.00 %</td>
</tr>
<tr>
<td>Having children, age 18 years and above, still in college or university in Malaysia?</td>
<td>23.33 %</td>
<td>76.67 %</td>
<td>100.00 %</td>
</tr>
<tr>
<td>Having children, age 18 years and above, still in college or university outside Malaysia?</td>
<td>15.00 %</td>
<td>85.00 %</td>
<td>100.00 %</td>
</tr>
</tbody>
</table>

* Only 80% (n = 60) of the married respondents have children.  
The frequency distributions are based on n=60.

### Age Group & Highest Level Of Education

<table>
<thead>
<tr>
<th>Age Group</th>
<th>21 to 30 years</th>
<th>40.57 %</th>
<th>35.85 %</th>
<th>21.70 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>51 years &amp; above</td>
<td>13.20 %</td>
<td>7.55 %</td>
<td>9.43 %</td>
<td>100.00 %</td>
</tr>
<tr>
<td>Total</td>
<td>100.00 %</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Preparation Of Income Tax Returns

<table>
<thead>
<tr>
<th>Who Usually Prepares the Income Tax Return Forms (Officially Known as the Tax Returns)?</th>
<th>Not Married n = 31</th>
<th>Married n = 75</th>
<th>All n= 106</th>
</tr>
</thead>
<tbody>
<tr>
<td>The respondent himself / herself</td>
<td>25.47 %</td>
<td>35.85 %</td>
<td>61.32 %</td>
</tr>
<tr>
<td>The spouse (wife / husband) of the respondent</td>
<td>N.A.</td>
<td>15.10 %</td>
<td>15.10 %</td>
</tr>
<tr>
<td>The respondent together with his / her spouse</td>
<td>N.A.</td>
<td>12.26 %</td>
<td>12.26 %</td>
</tr>
<tr>
<td>The respondent, with the help of others (other than spouses)</td>
<td>3.77 %</td>
<td>7.55 %</td>
<td>11.32 %</td>
</tr>
<tr>
<td>Total</td>
<td>100.00 %</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N.A. = Not Applicable
### TABLE 2: CHARGEABLE AND EXEMPTED INCOME

<table>
<thead>
<tr>
<th>Income Received By An Individual: Taxable or Exempted From Tax? (n = 106)</th>
<th>Yes * %</th>
<th>No %</th>
<th>Not Sure %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent received from letting out a house or property. Is the rental income taxable?</td>
<td>79.24</td>
<td>16.04</td>
<td>4.72</td>
<td>100.00</td>
</tr>
<tr>
<td>Dividend received from a bank or finance company (listed on the KLSE). Is the dividend taxable?</td>
<td>68.87</td>
<td>5.66</td>
<td>25.47</td>
<td>100.00</td>
</tr>
<tr>
<td>Interest on savings of less than RM100,000 in any fixed deposit or savings account in any bank or finance company. Is the interest earned exempted from tax?</td>
<td>32.08</td>
<td>9.43</td>
<td>58.49</td>
<td>100.00</td>
</tr>
<tr>
<td>Dividend received by members from a cooperative society in Malaysia. Is the dividend received exempted from tax?</td>
<td>16.98</td>
<td>7.55</td>
<td>75.47</td>
<td>100.00</td>
</tr>
<tr>
<td>An individual received dividend from a government sponsored unit trust (e.g. ASN, ASM).*1 Is the dividend received exempted from tax?</td>
<td>45.28</td>
<td>5.66</td>
<td>49.06</td>
<td>100.00</td>
</tr>
</tbody>
</table>

* A “yes” is the correct response.

*1. ASN is Amanah Saham Nasional (National Unit Trust), and ASM is Amanah Saham Malaysia (Unit Trust of Malaysia), both of which are sponsored by the Malaysian Government.
### TABLE 3: HUSBAND AND WIFE: JOINT OR SEPARATE ASSESSMENT

<table>
<thead>
<tr>
<th>The Respondents</th>
<th>All Respondents (n = 106)</th>
<th>Married Respondents (n = 75)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Husband and Wife: Joint or Separate Assessment and Spouse Relief</td>
<td>Yes * %</td>
<td>No %</td>
</tr>
<tr>
<td>If both husband &amp; wife have taxable income, can the wife request that her income be jointly assessed together with that of her husband?</td>
<td>25.47</td>
<td>36.79</td>
</tr>
<tr>
<td>If both husband &amp; wife have taxable income, can the husband request that his income be jointly assessed together with that of his wife?</td>
<td>30.19</td>
<td>23.58</td>
</tr>
<tr>
<td>If both husband &amp; wife have taxable income, and neither do not make any request for joint assessment, will their income be assessed separately under their respective names?</td>
<td>23.58</td>
<td>30.19</td>
</tr>
<tr>
<td>If the income of a husband &amp; his wife are to be assessed jointly under the husband’s name, is the husband entitled to a deduction of RM3,000?</td>
<td>69.81</td>
<td>7.55</td>
</tr>
<tr>
<td>If the income of a husband &amp; his wife are to be assessed jointly under the husband’s name, is the husband entitled to a further deduction of RM2,500 if the wife is a disabled person?</td>
<td>36.79</td>
<td>13.21</td>
</tr>
</tbody>
</table>

* A “yes” is the correct response.
### TABLE 4: PERSONAL AND SOME OTHER RELIEF

<table>
<thead>
<tr>
<th>If an individual has income, in computing his or her chargeable income, can he or she deduct the following and the stated amount from his or her income?</th>
<th>Yes * %</th>
<th>No %</th>
<th>Not Sure %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>A personal relief of RM8,000.</td>
<td>70.75</td>
<td>10.38</td>
<td>18.87</td>
<td>100.00</td>
</tr>
<tr>
<td>A sum amounting to RM5,000 if he or she is a disabled person.</td>
<td>33.70</td>
<td>13.04</td>
<td>53.26</td>
<td>100.00</td>
</tr>
<tr>
<td>Payment of medical expenses (for his or her parents) up to a maximum of RM5,000.</td>
<td>46.22</td>
<td>10.38</td>
<td>43.40</td>
<td>100.00</td>
</tr>
<tr>
<td>Expenses up to a maximum of RM5,000 incurred on the purchase of supporting equipment for the use of himself or herself (if he or she is disabled) or for the use of his or her disabled children.</td>
<td>25.47</td>
<td>8.49</td>
<td>66.04</td>
<td>100.00</td>
</tr>
<tr>
<td>Medical expenses up to a maximum of RM5,000 incurred on himself or herself or on his or her children who are suffering from serious disease.</td>
<td>34.91</td>
<td>8.49</td>
<td>56.60</td>
<td>100.00</td>
</tr>
<tr>
<td>Medical examination fees up to a maximum of RM500 incurred on his or her medical examination.</td>
<td>9.43</td>
<td>6.60</td>
<td>83.96</td>
<td>100.00</td>
</tr>
<tr>
<td>Education fees up to a maximum of RM5,000 incurred on himself or herself for education or training.</td>
<td>12.26</td>
<td>24.53</td>
<td>63.21</td>
<td>100.00</td>
</tr>
<tr>
<td>Expenses, up to a maximum of RM500 incurred on the purchase of books and, or journals.</td>
<td>24.52</td>
<td>7.55</td>
<td>67.93</td>
<td>100.00</td>
</tr>
<tr>
<td>A maximum of RM5,000 in relation to an individual’s EPF contributions and his or her (or spouse’s ) life insurance premium paid.</td>
<td>35.85</td>
<td>11.32</td>
<td>52.83</td>
<td>100.00</td>
</tr>
<tr>
<td>A maximum of RM3,000 in relation to medical and educational insurance premium paid.</td>
<td>19.81</td>
<td>14.15</td>
<td>66.04</td>
<td>100.00</td>
</tr>
<tr>
<td>A maximum of RM1,000 in relation payment to the EPF for annuity insurance scheme.</td>
<td>11.32</td>
<td>7.55</td>
<td>81.13</td>
<td>100.00</td>
</tr>
</tbody>
</table>

* A “yes” is the correct response.

*1. EPF is the Employees’ Provident Fund. It is mandatory for employees to contribute to the fund. Upon reaching the age of 55 a contributor is allowed to withdraw his or her contributions from the fund. The amount so withdrawn is not chargeable to tax.
### TABLE 5: TAX REBATES

If an individual has taxable income, in computing his or her tax payable, can he or she deduct the following from his or her tax chargeable?

<table>
<thead>
<tr>
<th>Description</th>
<th>Yes *</th>
<th>No</th>
<th>Not Sure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A rebate of RM350, if his or her chargeable income does not exceed RM35,000.</td>
<td>8.49</td>
<td>17.92</td>
<td>73.78</td>
<td>100.00</td>
</tr>
<tr>
<td>RM400 for purchase of computer for personal use.</td>
<td>21.70</td>
<td>7.55</td>
<td>70.75</td>
<td>100.00</td>
</tr>
<tr>
<td>Fees paid to the Immigration Department to obtain work permit for foreign worker (e.g. domestic maid).</td>
<td>7.55</td>
<td>6.60</td>
<td>85.85</td>
<td>100.00</td>
</tr>
<tr>
<td>The amount of zakat paid by a Muslim individual. *1</td>
<td>37.74</td>
<td>16.98</td>
<td>45.28</td>
<td>100.00</td>
</tr>
</tbody>
</table>

* A “yes” is the correct response.

*1. Zakat is a mandatory tithe payable annually by Muslims.
### TABLE 6: RELIEF IN RELATION TO CHILDREN

<table>
<thead>
<tr>
<th>The Respondents</th>
<th>All Respondents (n = 106)</th>
<th>Respondents Having Children (n = 60)</th>
</tr>
</thead>
<tbody>
<tr>
<td>When an individual has taxable income, in computing his or her chargeable income, can he or she deduct the following from his or her income?:-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RM800 for each child who is under 18 years old.*1</td>
<td>Yes * 75.47 No 10.38 Not Sure 14.15 Total 100.00</td>
<td>Yes * 83.33 No 10.00 Not Sure 6.67 Total 100.00</td>
</tr>
<tr>
<td>RM800 for each child whose age is 18 years or more, but still a full time student in school.*1</td>
<td>Yes * 70.75 No 8.49 Not Sure 20.75 Total 100.00</td>
<td>Yes * 78.33 No 8.33 Not Sure 13.33 Total 100.00</td>
</tr>
<tr>
<td>RM3,200 for each child whose age is 18 years or more, but still a full time student in a university or college in Malaysia.*2</td>
<td>Yes * 41.51 No 23.58 Not Sure 34.91 Total 100.00</td>
<td>Yes * 36.66 No 26.67 Not Sure 36.67 Total 100.00</td>
</tr>
<tr>
<td>RM1,600 for each child whose age is 18 years or more, but still a full time student in a university or college outside Malaysia.*3</td>
<td>Yes * 6.60 No 33.02 Not Sure 60.38 Total 100.00</td>
<td>Yes * 8.33 No 33.33 Not Sure 58.33 Total 100.00</td>
</tr>
<tr>
<td>RM5,000 for each disabled child.</td>
<td>Yes * 33.96 No 9.43 Not Sure 56.60 Total 100.00</td>
<td>Yes * 26.67 No 11.67 Not Sure 61.66 Total 100.00</td>
</tr>
</tbody>
</table>

| Is it true that any deduction for a child will only be allowed if that child is unmarried? | Yes * 27.36 No 9.43 Not Sure 63.21 Total 100.00 | Yes * 23.33 No 13.33 Not Sure 63.33 Total 100.00 |

* A “yes” is the correct response.

*1. Effective from the year 2004, such relief is RM1,000 instead of RM800.

*2. Effective from the year 2004, such relief is RM4,000 instead of RM3,200.

*3. Effective from the year 2004, such relief is RM1,000 instead of RM1,600.
REFERENCES


James, G. A. (1998), “Tax Literacy among School Teachers in Lawas, Sarawak”, Paper submitted to the *School of Accountancy, MARA Institute of Technology*, Shah Alam as partial fulfillment for the Bachelor of Accountancy (Hons.).


Quarantining Interest Deductions for Negatively Geared Rental Property Investments

Jim O’Donnell*

Abstract
Negative gearing has become a popular tax shelter in Australia. Australia is one of few countries to generally allow interest deductions for negatively geared rental property investments. Although the tax benefits of negative gearing at the investor level are quite well known, the tax policy arguments for and against negative gearing have not been thoroughly examined.

This is a paper about tax policy. It surveys the arguments for and against negative gearing. According to tax policy criteria, should negative gearing be allowed? Many commentators have speculated on what effect negative gearing has on the economy. Does it increase house prices and make home ownership less affordable? Or does it make accommodation more affordable by increasing the number of rental properties? Are there broader economic effects? Does it distort investment? Does it contribute jobs to the economy? Does it have an effect on interest rates? What is its impact on the tax revenue? A number of false assumptions have been made on both sides of the debate, undermining the arguments for and against negative gearing. Informed by quantitative and statistical analysis, this paper evaluates those assumptions and concludes that on balance there is a strong case for closing the tax shelter.

The final part of this paper considers alternative vehicles for denying negative gearing. Drawing on overseas experience, this paper evaluates the tax policy implications of various options for quarantining interest deductions. One critical question for tax policy debate is to determine the appropriate level for quarantining measures. Should they be confined to real estate investments or broadly cover all types of investments? As with all tax reform, closing the tax shelter will necessarily have impact on other tax policy settings. Tax policy gains may be achieved in some areas but this might be at the expense of others. By examining the tax policy effect of alternative measures, this paper discusses which option for quarantining interest deductions and eliminating negative gearing would work best in the Australian tax system.

INTRODUCTION
Negative gearing is a well-recognised taxation strategy in Australia. It has grown to become one of Australia’s most popular tax shelters, to the extent that a majority of our rental housing stock is now negatively geared.1

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*Jim O’Donnell is a Solicitor at Jackson McDonald Lawyers. The views expressed in this paper are his personal views only and are not to be taken as the views of his firm. This paper arises from an MTax project undertaken by the author as a UNSW student at Atax. Comments from Atax academics are gratefully acknowledged.

1 Australian Bureau of Statistics, Australian Social Trends 1999, “Housing – Housing Stock: Rental Investors”. Cf. Tax Institute of Australia “Tax Reform: Let there be no half measures” (1998) 1 Tax Specialist 185, 203, which remarkably describes negative gearing as “a much misunderstood term”. As an indicator of its popularity as a tax shelter, Australian Taxation Office, Taxation Statistics 2001-02 indicates that at 30 June 2002 the number of negatively geared rental property investors exceeded the number of trusts in Australia by more than two-thirds.

2 Tax Institute of Australia “Tax Reform: Let there be no half measures” (1998) 1 Tax Specialist 185, 203. Refer also to Figure 7 below.
While many investors are attracted to negative gearing as a legitimate method to help generate wealth and reduce tax, most of us are either unaware or do not care about the broader economic consequences of negative gearing and its tax policy implications.

Most major OECD countries have disallowed the tax advantages of negative gearing. For apparently political reasons, Australia has resisted. In 1985 the Australian government experimented with removing the tax shelter by enacting legislation that quarantined interest deductions on negatively geared real estate investments. This proved so unpopular the then Labor government repealed the quarantining provisions after only two years. Fortuitously, Labor returned to power at the 1987 election winning a record number of seats (86) in the House of Representatives.³

Learning from this experience, no Australian government has since looked to reopen the tax policy debate on negative gearing. Some commentators have formed the view that negative gearing is an entrenched part of Australian taxation, attaining the status of a ‘sacred cow’.⁴ However, it now appears a new movement is gaining force in the Australian community, a swelling undercurrent of increased willingness to question this tax shelter. Welfare representatives have been lobbying for change for some time, and they are not alone anymore. Opposition to negative gearing has been a policy platform of the Australian Democrats in recent years. In the media, we are now observing more frequent open criticism of negative gearing by members of parliament on both government and opposition benches.⁵ Although the Government has so far been able to dismiss protests from the welfare sector, minority parties and outspoken MPs, the Reserve Bank of Australia has also now weighed into the debate, stamping its arguments with compelling economic force. How long can the Government keep a lid on the debate?

**How Negative Gearing Works**

Rental properties are negatively geared for tax purposes⁶ when all rental deductions, including interest outgoings, depreciation and repairs, exceed rental income.⁷ This produces a tax loss. In Australia, this loss can be offset against other assessable income, thereby providing a tax saving to the investor and often taking their taxable income into a lower marginal tax bracket.⁸

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⁶ Negative gearing can also occur in the commercial sense, where interest expenditure exceeds net rental income, however due to statutory deductions, such as building write-off and depreciation, it is possible to have negative gearing for tax purposes for properties that are positively geared in commercial terms.
⁷ Negative gearing is generally associated with investment property, although the same tax avoidance strategy is also being applied to shares through investment vehicles such as ‘leveraged equities’: see e.g. ACOSS “Taxation in Australia: home truths and international comparisons” *ACOSS Info 347*, June 2003, p.23.
When the timing of losses and gains is considered, the benefits of negative gearing are even greater. In addition to the immediate tax benefit available from offsetting the rental loss against other income, the investor’s exposure to tax will generally be limited to the capital gain realised when the property is sold, which is taxed on a deferred and reduced basis and, in some cases (e.g. if a pre-CGT asset) it is not taxed at all.\(^9\)

The net effect of negative gearing is that the investor can come out ahead in economic terms and still reduce their tax liability.\(^{10}\) From a tax policy point of view, this represents a double departure from a comprehensive definition of income.

**THE TAX POLICY DEBATE**

The tax policy debate on negative gearing in Australia does not rest on any single issue or criterion. Tax design is shaped by the need to raise revenue and also by considerations of efficiency, equity, simplicity and enforceability.\(^{11}\)

**Revenue**

If the primary objective of taxation is to raise government revenue, then the fact that negative gearing results in a loss of government revenue needs to be weighed in the balance when deciding whether this tax shelter is something that Australia can afford. Statistics indicate about $2 billion in tax revenue is lost to negative gearing each year, and this figure is rising.

**Efficiency**

The efficiency or neutrality criterion has emerged in recent times as the core criterion for evaluating taxation measures.\(^{12}\) Under this criterion, it is important to consider whether allowing rental losses to be offset against other income has a distortionary effect on the Australian economy, and if so, whether any of these distortions are desirable or intended.

Below is a selection of efficiency related arguments examined in this paper:

- Negative gearing has led to increased house prices.
- Negative gearing has led to an increase in the number of dwellings available for rental accommodation and, in turn, lower rents.
- Negative gearing has led to increased employment and increased activity and investment in the residential construction sector.

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\(^9\) By allowing rental losses to be offset against other income, negative gearing further encourages the conversion of income on revenue account into capital gains. See e.g. Hamson, D. & Ziegler, P. “The Implications of Negative Gearing Restrictions and Capital Gains Taxation on Investment” (1986) 3 *Australian Tax Forum* 369.


Negative gearing encourages investment in assets such as property and shares that appreciate in value, rather than capital used in other areas of production that add value to the economy.

Negative gearing increases demand for loan finances and, in turn, leads to overheating of the economy and puts upward pressure on Australian interest rates.

Negative gearing exacerbates the effects of economic downturns as investors are forced to unwind their debts by cutting back spending.

Negative gearing has contributed to declining birth rates.

A number of important questions can also be asked of the macroeconomic effects of negative gearing. Looking beyond this paper, for example:

What is the impact of negative gearing on the level of investment in Australia?

Does negative gearing affect Australia’s international competitiveness?

Does negative gearing increase or reduce the overall level of employment, wealth and production (GDP) in Australia?

**Equity**

It is important to consider what distributional effects, if any, arise from negative gearing. Does negative gearing expand the divide between rich and poor?

It has been argued that negative gearing offends principles of distributional justice by favouring wealthier and higher income taxpayers, who own substantial landholdings, at the expense of the poor and low-income earners who struggle to find accommodation and cannot afford to purchase their own home.

**Compliance**

Compliance issues are just as important to keep in mind when evaluating any single tax measure as they are when considering the overall design of the tax system. Compliance issues have become more prominent in Australia in recent years thanks largely to advances in the ATO’s Annual Compliance Program and also in the area of tax compliance research.  

The ATO has on more than one occasion identified the rental property sector as a major problem area for tax compliance. Unfortunately for the ATO, the revenue problem arising from negative gearing is not simply a compliance issue. It is questionable that increased scrutiny of rental deductions alone would arrest the growth in rental losses.

A multitude of compliance issues could be raised about negative gearing. To mention one issue, consider the psychological effect on taxpayers of removing the tax shelter of negative gearing.

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A tax measure that is generally seen as unfair or arbitrary in its incidence can generate reluctance among taxpayers to comply.\textsuperscript{15} Applying this to quarantining, it is debatable whether the removal of negative gearing would give rise to improved attitudes of compliance (through a greater degree of respect for the tax system), or if it would encourage more extreme forms of tax planning (as it is so popularly entrenched in our tax system).

There is little doubt that successive federal governments in Australia have had the same clear expectations on how taxpayers would react if told they can no longer claim full interest deductions on their investments. For many taxpayers, rental property investments (made attractive by negative gearing) represent a substantial part of their retirement savings (their ‘superannuation’) – which would be made unattractive and put at economic risk if negative gearing is abolished. Perhaps negative gearing is now too entrenched to make its removal a possibility.

Is there a more serious danger that negative gearing conveys the wrong message to taxpayers – that it is acceptable to minimise tax, to lower your taxable income and access a lower marginal tax rate? Some might query whether this message is necessarily unhealthy, particularly if the result on the other side of the ledger is a healthy boost for investment.\textsuperscript{16}

\textbf{Simplicity}

Under this criterion, consider for example whether the Australian tax system would be a more complex system, with higher compliance costs, if we introduced quarantining measures. It is also important to ask whether such measures would necessarily stop the revenue leakage. Looking to overseas experience, which method of quarantining would work best in Australia? Should Australia consider going back to the measures we had in the 1980s?

\textbf{International}

Does overseas experience present a clear solution? Would Australia become internationally more competitive if we took a path taken by one of the other OECD nations to restrict or deny the tax shelter? What would be the effect of introducing quarantining measures on international capital flows into and outside Australia?

\textbf{Political}

The political context must also be taken into account when discussing tax policy and possible tax reform. Legislative change has no chance unless there is the political will to consider and debate the issues and popular agreement to the change. The current political reality about negative gearing is that the Australian government believes it would be political suicide to contemplate removing the tax shelter.\textsuperscript{17}

\textbf{THE LEGAL CASE FOR NEGATIVE GEARING}

The deductibility of interest expenditure is at the heart of negative gearing.

\textsuperscript{17} For example, Federal Treasurer Peter Costello has repeatedly ruled out changes to negative gearing rules: Mellish, M. & Hepworth, A. ‘RBA Targets Negative Gearing’ \textit{Australian Financial Review}, 15 November 2003 \texttt{http://afr.com/articles/2003/11/14/1068674383089.html}.  

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In Australia, interest is ordinarily deductible under the general deduction provisions of sec.8-1 of the 1997 Act, and previously sec.51(1),\(^{18}\) provided the money borrowed has the required nexus with assessable income – as it must be incurred “in gaining or producing” such income.\(^{19}\)

Looking at the deductibility of expenses generally, in cases where there is a disproportion between the outgoings and assessable income, the courts have been prepared to consider the advantages sought by the taxpayer, their subjective purpose, motive or intention, in determining whether the outgoings are deductible.\(^{20}\)

By definition, negative gearing involves a disproportion between outgoings and assessable income. It arises only where the deductible expenses, including interest, outweigh the assessable income from an investment in an income year.

However, the courts in Australia have protected the tax shelter of negative gearing without normally considering the subjective purpose of the taxpayer or making a contextual and active enquiry for the reasons the expenditure was incurred.\(^{21}\)

Interest will normally be deductible where, from an objective evaluation of the facts, the borrowed funds are used for an income producing purpose such as to purchase an income producing property.\(^{22}\)

The fact that an income producing property is negatively geared will not normally affect the deductibility of the interest.\(^{23}\) Nor does the fact that the investor acquired and holds the property to make a capital gain.\(^{24}\)

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\(^{19}\) Grbich, Y. “Revisiting the Main Deduction Provision: Clear Concepts for a Mass Decision-Making Tax System” (1990) 17 Melbourne University Law Review 347, 348, 349. This is a matter of characterisation and normally depends on how the borrowed funds are used.


\(^{21}\) See the discussion in this paper below on FCT v Jannor Nominees Pty Ltd (1987) 19 ATR 254.


The Australian government has generally supported the tax shelter of negative gearing, despite its growing burden on the tax revenue.\textsuperscript{25}

In December 1967, the Commissioner of Taxation issued an income tax ruling giving tacit approval to negative gearing.\textsuperscript{26}

On 30 June 1983 the Treasurer announced that the Commissioner would not be changing the long standing practice of allowing deductions in full for interest on monies borrowed to invest in rent-producing properties where the interest and other outgoings exceeded the rental income in any year.\textsuperscript{27} This came after a brief period when the Victorian Deputy Commissioner took matters into his own hands by denying real estate investors in Victoria a deduction for interest expenses to the extent they exceeded rental income.\textsuperscript{28}

However by 1985 the government came to realise that negative gearing of rental properties was one of Australia’s most popular tax shelters. The \textit{Draft White Paper} on ‘Reform of the Australian Tax System’, published in June 1985, estimated that negative gearing of rental properties cost the revenue about $175 million per annum, and recommended quarantining measures.\textsuperscript{29}

**QUARANTINE MEASURES IN AUSTRALIA**

To implement the Draft White Paper recommendation, the government introduced legislative changes, appearing as Subdiv.G of Div.3 of Pt.III of the \textit{Income Tax Assessment Act 1936}, which effectively abolished negative gearing for real estate

apportionment of interest deductions where investors in shares or other listed securities borrow using financial products that have a capital protection feature.


\textsuperscript{26} Taxation Ruling \textit{IT 166 “Income Tax: Interest on Money Borrowed to Acquire an Income Producing Asset”}, 14 December 1967, withdrawn 2 July 1997 (following the decision in \textit{Steele v. FC of T} 97 ATC 4729). See also Richards, R. “Interest on Money Borrowed to Acquire an Income Producing Asset” (1985) \textbf{55(9) The Australian Accountant} 76.

\textsuperscript{27} Treasurer Press Release No. 45 of 30 June 1983. See also Taxation Ruling \textit{IT 2167 “Apportionment of Losses and Outgoings in Relation to Income-Producing Properties that are not wholly used for Deriving Rental Income”}, 4 July 1985, paragraph 3.


investors. The restrictions affected only real estate purchased after 17 July 1985. The reform quarantined any losses made from owning rental properties, so that any excess of deductions over rental income could not be used to reduce tax on other sources of assessable income.\textsuperscript{30} However, losses could be carried forward to offset against future rental profits and reduce taxable gains made from other rental properties purchased after that date.\textsuperscript{31}

This quarantine measure was justified on three main grounds: (i) taxpayers should not have to subsidise rental property investors; (ii) negative gearing resulted in increased home prices to the detriment of ordinary home buyers; and (iii) an estimated revenue gain of $55m in 1986-87, $100m in 1987-88, rising to $195m in 1990-91 and subsequent years.\textsuperscript{32}

Due to various pressures, in one of the more remarkable backflips in Australian tax policy history, the government removed the measure, effective from 1 July 1987.\textsuperscript{33} According to official records, repeal of the measure was justified on two main grounds: (i) uniformity of tax treatment of interest costs for all types of investment; and (ii) the belief that the excessive tax benefits offered to high income earners by negative gearing were adequately countered by other tax reform measures, notably introduction of the capital gains tax regime.\textsuperscript{34} There were also unofficial reasons for the quick repeal of the measure, including an impending federal election and complaints from NSW facing a State election.\textsuperscript{35}

Since July 1987, negative gearing has been allowed on all forms of investments in Australia.\textsuperscript{36}

**JUDICIAL APPROVAL OF NEGATIVE GEARING**

Australian courts have made it quite clear that if there is to be any change to the law on negative gearing, it will require specific legislative amendment, rather than any change in judicial attitude or interpretation.\textsuperscript{37}

\textsuperscript{30} The quarantining of interest deductions is a recommendation revived recently by ACOSS in “Taxation in Australia: Home Truths and International Comparisons” ACOSS Info 347, June 2003, p27 (Recommendation 4).
\textsuperscript{32} Commonwealth, Parliamentary Debates, House of Representatives, 17 April 1986, pp.2553-4 (Hurford, Minister for Immigration and Ethnic Affairs).
\textsuperscript{33} By virtue of sec.82KZD(1A), the quarantining measure did not apply to the 1987-88 and subsequent income years.
\textsuperscript{34} Commonwealth, Parliamentary Debates, House of Representatives, 29 October 1987, p.1720 (Duffy, Minister for Trade Negotiations).
\textsuperscript{35} Tax Institute of Australia “Tax Reform: let there be no Half Measures” (1998) 1 Tax Specialist 185, 204
\textsuperscript{37} On the judiciary’s stance on negative gearing, see e.g. FCT v Jannmor Nominees Pty Ltd (1987) 19 ATR 254; and FCT v Hart [2004] HCA 26, which confirmed the “legitimacy” of negative gearing.
**Janmor Nominees**\(^{38}\) is the landmark case on negatively gearing rental properties. The decision in that case was handed down after the quarantine measures were repealed but was based on the law in place before those measures were introduced. The Court held that high gearing alone does not deprive interest payments of the character of outgoings incurred in gaining or producing assessable income. Merely because expenses exceed receipts does not justify a severance of outgoings into components, nor render the outgoings of a private, domestic or capital nature, nor activate any deeper enquiry into why the expenditure was incurred in determining whether a deduction should be allowed at all or whether it should be apportioned.\(^{39}\)

The precedent established in *Janmor Nominees* could be criticised on the basis that the Court has either ignored or applied inadequately the legal nexus and apportionment requirements of sec.8-1. If the courts were prepared to revisit *Janmor Nominees*\(^{40}\) and the legal nexus and apportionment requirements, deductions from negative gearing could be effectively quarantined by relying on sec.8-1 without the need for legislative amendment. (Given the widespread acceptance of the *Janmor Nominees* decision by the courts in subsequent cases, by consecutive governments and by the ATO in its rulings, this possibility will probably never amount to more than wishful thinking).

The legitimacy of negative gearing on rental properties was confirmed by the High Court in 2004 in *Hart’s case*,\(^{41}\) where the taxpayers maximised their loss from negative gearing by using a split loan and capitalising interest on their rental property while initially only paying off the mortgage on their family home. The High Court denied part of the interest deduction under Part IVA, but had no reason to upset the Full Federal Court’s finding that the full interest expenditure was otherwise deductible under sec.8-1.

**TWO CRITICAL ASSUMPTIONS**

On closer examination, and as an appropriate starting point for analysis, it appears that two fundamental assumptions underlie the major arguments in the current policy debate on negative gearing.

1) Negative gearing increases house prices.
2) Negative gearing increases housing stock.

A core problem in the debate is that these assumptions have not been adequately tested. If they are wrong then the arguments that rely on them are misinformed and the direction of the policy debate has been misguided. If we are to have a meaningful debate on tax reform, we need to be reliably informed and make a choice between sound arguments based on correct and reliable information rather than on false assumptions.

On the first assumption, supporters of the tax shelter claim that increased house prices benefit homeowners, and refer to the fact that most Australians own their own home. Conversely critics claim it redistributes wealth and is inequitable to those who cannot afford their own home.

\(^{40}\) *FCT v Janmor Nominees Pty Ltd* (1987) 19 ATR 254 (decision 7 September 1987).
\(^{41}\) *FCT v Hart* [2004] HCA 26 (27 May 2004).
On the second assumption, supporters claim that increased housing stock has led to lower rents and more affordable housing, which has also been good for construction, jobs and the economy. Critics assert that it has distorted investment away from production, and also argue this has led to increased housing debt and interest rates, with negative side effects for the Australian dollar and the economy.

It is impossible to resolve the debate without testing these critical assumptions. This paper below tests these assumptions and evaluates the related arguments using empirical evidence drawn from economic and taxation statistics.

**ECONOMIC DATA**

The most probative way of testing economic arguments about negative gearing is to test the statistical relationship over time between negative gearing rental losses and relevant economic variables. The strength of a statistical relationship between two variables can be found by ascertaining the correlation coefficient. The coefficient works on a scale from –1 to +1. A coefficient of 0 indicates no linear relationship between two variables. Plus 1 indicates a positive linear relationship between the variables. Minus 1 indicates a negative (inverse) linear relationship. Whether a coefficient is statistically significant depends on the magnitude of the coefficient and the number of data pairs from which the coefficient is derived.

Table 1 below provides a matrix of correlation coefficients for negative gearing rental losses and a range of relevant economic variables. Data on all the variables except “negative gearers” and “negative gearing rental losses” (which are derived from ATO Statistics) are sourced from the Australian Bureau of Statistics (using ABS definitions) over a period up to 17 years (1987 to 2004). The correlation coefficients shown in the table are obtained by comparing variations in each of the variables over a common period of time. Statistically significant values appear in bold.

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42 A relatively high coefficient may not be statistically significant if it is derived from only a small number of data pairs. For example, if there are only 4 data pairs, a coefficient as high as 0.949 will still not be significant. Conversely, a relatively low coefficient could be significant if there are a large number of data pairs. For example, a coefficient of 0.25 would be significant if derived from 62 data pairs. See e.g. Bluman, A.G. (1992) *Elementary statistics: a step by step approach*, WCB, Dubuque, Appendix C, Table I “Critical Values for the PPMC”.

Where there is a statistically significant correlation between negative gearing and another factor, it makes it possible to conclude that negative gearing could have an effect on that other variable, even causal, provided other possibilities can be excluded.

Where there is a weak correlation (close to 0), it makes it possible to exclude negative gearing as a factor that may affect the other variable. Therefore it should be noted that all the values shown in Table 1 under the column “negative gearing rental losses” might be useful.

The following key observations can be made from the coefficients in Table 1:

- There is a strong correlation between the number of negative gearers and the amount of negative gearing rental property losses.
- House prices have a strong positive relationship with interest rates and to a lesser extent with the amount invested in private fixed capital formation. House prices also have a significant inverse relationship with outstanding investment property loans. However, it is notable that house prices have no observable relationship with any other indicated variable, including negative gearing. This suggests that house prices rise anyway, regardless of negative gearing.
- Negative gearing appears to have a significant inverse relationship with capital formation and with the number of rental investors. Curiously, this means that negative gearing tends to fall as the level of capital formation and the number of rental investors rise. A similar relationship exists between the number of negative gearers and dwelling approvals and with capital formation.
- There is a positive correlation between negative gearing and interest rates. The relationship is not statistically significant but justifies closer attention.

These observations are relied upon in the next section of this paper, which tests two critical assumptions in the debate on negative gearing.
TESTING THE ASSUMPTIONS

Increased house prices

Housing prices have risen dramatically in the past few years, but have fallen in recent times. From a ratio of housing prices to average incomes, Australia has amongst the most expensive housing in the developed world.

On the other hand, the recent housing price boom in Australia is not unique. Since the mid-1990s, several other countries have recorded larger house price rises than Australia.

When it quarantined interest deductions on real estate investments in 1985, the government made an admission that negative gearing increased real estate prices. In theory, by making property ownership more attractive to investors than it otherwise would be, it is contended that negative gearing leads to an increased demand for residential property and, in turn, real estate prices rise. It is argued that house prices continue to rise from negative gearing until the tax savings has been ‘capitalised’ into the price. Economic modelling and research has been relied on to substantiate this price effect.

As Figure 1 shows, explosive growth in house prices really began in 1988. Some explain this by contending that removal of negative gearing restrictions in late 1987 brought investors back into the real estate market. The better view is that house prices rise anyway, regardless of negative gearing. They fluctuate widely around long-term trends. Many factors affect real estate prices. One factor is believed to be current income tax policy. Statistics do not support the contention that negative gearing is an influential factor. Statistics show there is no observable relationship between negative gearing and house prices. Other factors

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44 See e.g. Walkley, P. “Negative Thinking” (2003) 121 The Bulletin 62.
54 From data obtained from Australian Taxation Office, Taxation Statistics 1999-2000, table 7, Australian Taxation Office, Taxation Statistics 2000-01, table 5, and Australian Bureau of Statistics, Catalogue No. 6416.0 “House price indexes: Eight capital cities” 4 March 2004, the Pearson product moment correlation coefficient between the two is measured at -0.2528. This is insignificant and indicative of no linear relationship between the variables. In magnitude, it is well below the critical value of 0.707 (at a significance level of 0.05) for a data series of 8 years (6 degrees of freedom). See e.g. Bluman, A.G. (1992) Elementary statistics: a step by step approach, WCB, Dubuque, pp.377-383, 554.
need to be considered, including interest rates and private fixed capital formation, the latter being a factor related to both negative gearing and house prices.

**FIGURE 1: GROWTH IN HOUSE PRICES AND INVESTMENT PROPERTY LOANS AND MOVEMENTS IN INTEREST RATES IN AUSTRALIA 1987–2003**

The gap between growth in house prices and housing loans in 1988 can be explained by the October 1987 stock market crash, when investors sold out of equities seeking better returns from residential property. Growth in investor property loans resurged as more investors entered the real estate market, forcing a credit squeeze as house prices soared and interest rates climbed to record levels.  

The rise in house prices and investment loans in recent years can also be attributed to tax reforms including introduction of the CGT discount in September 1999, and the GST and first home owner grants after June 2000.

The Productivity Commission, in its 2004 housing affordability inquiry, found that negative gearing is just one feature of Australia’s income tax system that may be

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contributing to house price pressures, although in principle negative gearing does not favour private investment in rental housing over other passive investments. While it recommended broader review of a range of features of the income tax system, the Productivity Commission indicated that the focus should be on the capital gains tax regime. 57

**Increased housing stock**

It has been argued that negative gearing increases the availability of rental properties in the long run by increasing new housing construction. 58 Support is given for this view in a 1989 Reserve Bank study that found a lowering of tax incentives available to real estate investors leads to a decrease in the construction of real estate. 59 Those who run this argument also refer to the slowdown of new residential construction for the period when negative gearing was abolished. 60

Statistics do not support the argument that negative gearing leads to an increase in the number of dwellings, as there is no firm correlation between the two variables. 61 There is also no observable relationship between negative gearing and construction activity or rental property loans. Curiously, the inverse relationship suggested by the statistics between negative gearing and the number of rental property investors supports a contrary conclusion. 62 This may give weight to the hypothesis that as negative gearing is capitalised into rental housing prices, the return on the capital invested is diminished.

It is fallacious to assume interchangeability in negative gearing and the construction of new dwellings. Rental property investors do not need to build because they can purchase from owner-occupiers or other investors. Housing stock levels need not change to accommodate an increase in rental property investment. What might be expected to change is the ratio of rental premises compared to owner occupied dwellings.

It is also misleading to claim, as the real estate industry did at the time, that the previous Government's decision to remove the tax benefits of negative gearing for new residential property investments was the primary reason for a collapse in property markets in the mid 1980s. The main reasons were increases in interest rates and the greater attractiveness of shares as an investment vehicle. And, it must be noted, the 'collapse' was confined largely to Sydney. 63

61 Even if it does, a subsidy for purchasers of newly constructed housing might be considered a more efficient and direct method to encourage the construction of new dwellings. See e.g. Hanegbi, R. “Submission – Housing Affordability” 21 October 2003, p.3.
62 On these statistical relationships, refer to the table of correlation coefficients at Table 1 of this paper.
CONTRADICTED ARGUMENTS

Having formed a view that several critical assumptions about negative gearing are false, it is important to isolate the arguments that rely on them. The major arguments contradicted by the statistics are summarised in Table 2 and are discussed in turn below.

TABLE 2: SUMMARY OF ARGUMENTS BASED ON THE FALSE ASSUMPTIONS

<table>
<thead>
<tr>
<th>Tax Policy Criteria</th>
<th>Summary of Contradicted Arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>Negative gearing rewards home ownership due to rising house prices</td>
</tr>
<tr>
<td>Equity</td>
<td>Negative gearing discriminates against non-home owners (the young and poorer sections of the community) by locking them out of the real estate market with increased house prices</td>
</tr>
<tr>
<td>Equity</td>
<td>Negative gearing makes rental accommodation more affordable by lowering rents as a result of an increased supply of rental properties and lower costs for landlords</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Negative gearing is good for the economy because it has led to increased jobs and activity in the residential construction sector</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Negative gearing leads to a substitution of investment from productive capital formation into real estate and other appreciating assets</td>
</tr>
</tbody>
</table>

**Negative gearing rewards home ownership**

Australia has a high rate of home ownership. If negative gearing has raised house prices, the one group clearly benefited by it is homeowners, who represent approximately two-thirds of the population.64

This argument is contradicted by the statistics, which indicate there is no relationship between negative gearing and house prices.

**Wealth inequality**

“Home ownership is falling. It is harder than ever for younger or poorer Australians to become homeowners.” 65

Statistics show that home ownership for first homebuyers is becoming increasingly difficult to attain, even after direct measures such as the first home owners grants have been implemented.

For example, in March 2004 the percentage of first homebuyers fell to a record low of 12.5%, a continuation of the general decline since the record high of 25.8% set in July 2001.66


If negative gearing has led to increased real estate prices, it has advantaged people who own real estate at the expense of those who do not.\textsuperscript{67}

Assuming this to be correct, the broad effect of rising real estate prices is a redistribution of wealth from those who do not own real estate to those who do, from the poorer to the wealthier sections of the community.\textsuperscript{68}

Higher real estate prices will tend to ‘lock out’ some people (usually younger persons and lower income earners) who have not yet entered the real estate market.\textsuperscript{69} It can accelerate increases in house prices, making it harder for people to buy their first home.\textsuperscript{70} A recent study has confirmed that while young homeowners are likely to have particularly high leverage, young households in general are less likely to be homeowners.\textsuperscript{71} It is relevant to look at the demographics of home ownership, as shown in Figure 2.

\textbf{FIGURE 2: AGE OF OWNER OCCUPIERS AND RENTERS, 1995-96} \textsuperscript{72}

![Figure 2](image)

The proportion of baby boomers owning rental property is notably high when compared to ownership by 18-34 year olds, who held 23% and 19% of rental

\textsuperscript{67} See e.g. Hanegbi, R. “Negative Gearing: Future Directions” (2002) \textit{Deakin Law Review} 349.

\textsuperscript{68} People who own real estate are clearly advantaged when prices rise. The benefit can be realised by selling the property or borrowing against the increased equity. People who have not yet entered the real estate market, and those who wish to upgrade to real estate of greater value, are clearly disadvantaged by increased real estate prices. See e.g. Hanegbi, R. “Negative gearing: future directions” (2002) \textit{Deakin Law Review} 349, 356-7.

\textsuperscript{69} Hanegbi, R. “Negative Gearing: Future Directions” (2002) \textit{Deakin Law Review} 349, 357.

\textsuperscript{70} May, A. “Unit Defence” \textit{Sydney Morning Herald}, 10 April 2003.


\textsuperscript{72} Australian Bureau of Statistics, \textit{Australian Social Trends 1998} “Housing - housing stock: wealth in the family home”. 

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properties in 1993 and 1997 respectively, but who represented 18.2% and 17.1% of the adult population.\textsuperscript{73}

It is also important to understand the demographics of home ownership when considering political implications. While negative gearing and home ownership are generally more associated with the baby boomer generation, Figure 3 illustrates that as a percentage of the voting population, baby boomers are a significant but declining force.

**FIGURE 3: ADULT BABY BOOMERS AND 18-35 YEAR OLDS AS A PERCENTAGE OF VOTING AGE AUSTRALIANS** \textsuperscript{74}

Affordability of homeownership for younger Australians is a serious issue. However, the absence of a statistically significant relationship between negative gearing and house prices suggests that blame should not rest with negative gearing.

**Lower rents**
Renting has become unaffordable for many Australians.\textsuperscript{75}

There are two ways negative gearing could lead to lower rents: (i) by increasing the supply of rental properties; and (ii) by lowering costs for landlords.\textsuperscript{76}

Economic analysis of the Australian real estate market has given support to the theory that in the long term, the tax shelter of negative gearing increases the supply of rental properties and leads to lower rents.\textsuperscript{77}

\textsuperscript{73} Australian Bureau of Statistics, *Catalogue No. 3201.0 “Population by Age and Sex, Australian States and Territories”*, 19 December 2003, Table 9.

\textsuperscript{74} Australian Bureau of Statistics, *Catalogue No. 3201.0 “Population by Age and Sex, Australian States and Territories”*, 19 December 2003, Table 9.

\textsuperscript{75} Senator Andrew Murray, Australian Democrats, *Press Release Number 03/485*, 3 July 2003, who observed that more than 60% of renters on low or moderate incomes pay unaffordable rents (more than 30% of their income).

As the theory goes, because residential housing stock is fixed in the short term, negative gearing is not expected to increase the supply of rental accommodation or materially affect rents in the short term. In the long term, however, if negative gearing increases the supply of rental accommodation more than it increases demand, it could lead to lower rents.  

The critical flaw in this argument is the assumption that negative gearing increases the supply of rental properties. This premise is contradicted by statistical evidence that there is no firm correlation between negative gearing and the number of dwellings.

Those who support negative gearing, and the argument that it leads to lower rents, often refer to the state of the Sydney property market in the period when the tax shelter was abolished between 1985 and 1987. During this period there were large rental increases in parts of Sydney.

It involves a quantum leap in logic, a non sequitur, to imply from this that negative gearing leads to lower rents. It is not possible to attribute the rise in Sydney conclusively to the abolition of negative gearing. There was no real increase across the rest of Australia and in fact many cities experienced a real decrease in rents over the same period.

Moreover, it is doubtful that landlords would pass on the benefits of negative gearing to tenants in the form of lower rents. First it is doubtful that negative gearing reduces costs to landlords. Second, it is doubtful that any benefit can be passed on if it is already fully capitalised in the price of the property. Third, it is doubtful that landlords have the altruism to defy market forces and pass on lower costs to tenants.

Statistics indicate the rise in housing costs for private renters in Australia is comparable to the rise in house prices. If house prices rise then housing loans and

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79 In logic, this reasoning involves the classical fallacy that succession in time implies a causal relationship. This fallacy is often cited in the Latin maxim post hoc, ergo propter hoc. See e.g. Nygh, P.E. & Butt, P. (eds) (1997) Butterworths Concise Australian legal dictionary, Butterworths, Sydney, pp.277, 309.
82 Between 1995-96 and 2000-01, for example, real average weekly housing costs for private renters rose by 4% from $166 to $173. Over the same period, the mean value of all owner-occupied dwellings in Australia rose by 5% from $171,000 to $180,000. This rise in house values was not reflected in average weekly housing costs for owners with a mortgage, which fell from $227 to $220. This reflects the substantial falls in housing loan interest rates over the period. See Australian Bureau of Statistics, Catalogue No. 4130.0.55.001 “Housing Occupancy and Costs, Australia”, 21 April 2004; Australian Bureau of Statistics, Australian Social Trends 1998 “Housing - housing stock: wealth in the family home”.
borrowing costs would also be higher. There is little reason why landlords should not pass on the increased costs in the form of higher rents.

Even if negative gearing does make renting more affordable, there are more direct, efficient, well-targeted and equitable ways to achieve this outcome. 83

**Construction jobs and the economy**

It is claimed that negative gearing has increased jobs and activity in the residential construction sector, growing our residential housing stock and contributing about 3% to the economy. 84

The claim that residential housing contributes about 3% to the economy may be true. However, the view that negative gearing has contributed to jobs and activity in this sector is, with respect, misconceived.

After the Victorian Deputy Commissioner denied negative gearing in 1983, supporters of negative gearing observed economic dislocation, due to a stifling of real estate investment and declining growth in the housing sector. The Federal Minister for Housing and Construction concurred with this observation. 85

It was predicted that the construction industry would falter and the decline would flow on to other industries and employment levels would suffer. 86 Statistics later proved this prediction was unfounded.

Worker numbers in the construction industry have varied cyclically with dwelling approvals and have broadly followed movements in house prices and investment property loans. Figure 4 shows a decline in dwelling approvals in the 1985-86 and 1986-87 years, followed by a strong upwards swing in 1987-88 and 1988-89. While this corresponds in time with the introduction and removal of the quarantining measures, it does not necessarily follow that negative gearing has led to increased construction jobs. Movements in construction activity spanning the quarantining period can be attributed to cyclical factors affecting the state of the economy, as indicated in Figure 5. 87

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83 For example, a program of increased rental assistance. See e.g. Hanegbi, R. “Negative Gearing: Future Directions” (2002) 7 Deakin Law Review 349, 362; Hanegbi, R. “Submission – Housing Affordability” 21 October 2003, p.3; Senator Andrew Murray, Australian Democrats, Press Release Number 03/423, 13 June 2003.

84 See e.g. Senator Andrew Murray, Australian Democrats, Press Release Number 03/485, 3 July 2003.


87 As can be seen in the graph below, there are repeated troughs in employment in the construction industry and at the same time in the wider economy, with the sharpest downturn during the recession in 1990 and 1991.
The fact that there is a negative correlation between negative gearing and building approvals and worker numbers in the construction sector contradicts the argument that negative gearing has led to increased jobs and activity in that sector.

It is not possible to conclude that jobs would be lost if negative gearing was abolished. In fact, statistics support the converse argument that higher rental losses from negative gearing may retard jobs growth and activity in the sector. The data is consistent with the hypothesis that when more people are attracted to rental property investments, they

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look to buy established houses rather than build new ones, and therefore the level of housing stock is not affected.  

Even if it can be proven that negative gearing does encourage construction of new housing, there are more direct and efficient ways to achieve this.  

**Distortion of investment**

Critics of negative gearing argue that the tax shelter encourages investment in assets such as property and shares that appreciate in value, rather than capital used in other areas of production that add value to the economy. Pointing to the recent growth in investment in inner city apartments and other rental properties, critics claim that policies intended to ignite investment in new technologies have instead fuelled an old-fashioned Australian property boom. 

The tax system is not neutral, and offends the tax design principle of efficiency, if tax shelters, such as negative gearing, lead to an over-investment in dwellings, or the over-gearing of rental properties.

Statistics support the view that when negative gearing in rental properties increases, growth in fixed capital investment tends to fall, and *vice versa*. They show a strong negative linear relationship between negatively geared rental property losses and private fixed capital formation.

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90 On the relationship between negative gearing and increased investment in rental properties, see the discussion above on the argument that negative gearing has increased housing stock. 

91 Hanegbi, R. “Negative Gearing: Future Directions” (2002) 7 Deakin Law Review 349, 359, citing Australian Bureau of Statistics, *Catalogue No. 8750.0*. See also Hanegbi, R. “Submission – Housing Affordability” 21 October 2003, p.3; Australian Bureau of Statistics, *Catalogue No. 8750.0 “Building Activity Australia, Dwelling Unit Commencements, Preliminary”* 18 March 2004; and Australian Bureau of Statistics, *Catalogue No. 5609.0 “Housing Finance, Australia”, 12 May 2004*. Some would now regard the benefits of the first homeowners’ grants as illusory. Although they had an initial impact on construction, it only provided short-term relief, since the grants may have largely fed increased construction costs and house prices. 


95 The availability of depreciation deductions on capital of production may be thought to provide a comparable tax incentive for investment in productive assets. However, throwing tax expenditure at a problem caused by other tax expenditure is not the ideal solution for a tax system. Just as two wrongs don’t make a right, it hard to accept that the distortions caused by negative gearing and the CGT discount could be neutralised by the depreciation deduction, as rental property investors also claim deductions for depreciation and building write-off. 

This does not mean there is a causal relationship. It does not necessarily follow that negative gearing causes investment dollars to be pulled out of fixed capital formation. Observations below suggest four possible alternatives: (i) the relationship could work in the other direction, i.e. investment in fixed capital leaves fewer dollars for investment in negatively geared rental properties; (ii) the relationship may be caused by a third variable, e.g. investment loan finance or interest rates; (iii) there could be a complexity of interrelationships among many variables; or (iv) the relationship may be coincidental.\footnote{On the alternative statistical explanations, see e.g. Bluman, A.G. (1992) \textit{Elementary Statistics: A Step by Step Approach}, WCB, Dubuque, pp.382-3.}

First, it may be observed that there is no statistically significant relationship between fixed capital formation and the number of rental property investors.\footnote{From data obtained from Australian Taxation Office, \textit{Taxation Statistics 1999-2000}, table 7, Australian Taxation Office, \textit{Taxation Statistics 2000-01}, table 5, and Australian Bureau of Statistics, Catalogue No. 5206.0 \textit{“Australian National Accounts: National Income, Expenditure and Product”}, 3 March 2004, table 33, the correlation coefficient (-0.4838) suggests at best a weak relationship between the two variables.}

Second, there was no significant rise in private fixed capital formation when the tax shelter of negative gearing was abolished in the 1986 and 1987 years.\footnote{The rise in 1986 (12.0\%) and 1987 (9.3\%) were both close (within 0.3 standard deviations) to the mean rate of growth (9.6\%) for the period 1961-2003. See Australian Bureau of Statistics, Catalogue No. 5206.0 \textit{“Australian National Accounts: National Income, Expenditure and Product”}, 3 March 2004, table 33.} Nor was there any drop in private capital formation growth when the tax shelter was reinstated in the 1988 year. In fact, there was a near record 22.1\% and 22.8\% rise in 1988 and 1989 respectively.\footnote{Australian Bureau of Statistics, Catalogue No. 5206.0 \textit{“Australian National Accounts: National Income, Expenditure and Product”}, 3 March 2004, table 33.}

Third, while there is evidence that negative gearing increases investment in rental properties, this does not mean it takes valuable investment dollars away from productive capital into the construction of new dwellings.\footnote{Refer to the argument on increased investment in rental properties in the discussion above addressing the assumption that negative gearing has led to increased housing stock.}

Fourth, even if there was a linear causal relationship between negative gearing and fixed capital formation, it cannot be assumed that there is an equal rate of substitution. The fact that the amount of funds invested in fixed capital formation each year far exceeds the total equity in rental properties that are negatively geared indicates that major changes in negative gearing activity and rental property investment would probably not have as large an impact on fixed capital investment.

In the 1997 year, for example, over $93.6 billion was invested on private fixed capital formation in Australia.\footnote{Rather than averaging investment loans across all rental properties, this estimate is made from calculating the ratio of number of negatively geared investors to the number of investors who claimed rental interest deductions. For 1997, it is estimated that 78.2\% of investment loan funds were borrowed by negatively geared investors. Applied to $40.4 billion in private investment loans, this gives an estimate of $31.6 billion outstanding loans by negatively geared investors. See Australian Taxation Office, \textit{Taxation Statistics 2000-01}, table 5, and Australian Bureau of Statistics, Catalogue No. 5206.0 “Australian National Accounts: National Income, Expenditure and Product”, 3 March 2004, table 33.} As at 30 June 1997, after taking into account investment loan finance,\footnote{Australian Bureau of Statistics, Catalogue No. 5206.0 “Australian National Accounts: National Income, Expenditure and Product”, 3 March 2004, table 33.} an estimated $66.1 billion was invested in equity in negatively geared
rental properties. Note that negative gearing rental losses that year are small in comparison ($2.78 billion).

**FIGURE 6: GROWTH AND DECLINE IN PRIVATE FIXED CAPITAL FORMATION, 1961-2003**

The economic data suggests but does not compel the conclusion that the tax shelter of negative gearing leads to a substitution of investment from productive capital into rental properties.

**SUPPORTED ARGUMENTS**

The major arguments that are supported by the statistics are summarised in Table 3 and are discussed below.
TABLE 3: SUMMARY OF ARGUMENTS SUPPORTED BY THE STATISTICS

<table>
<thead>
<tr>
<th>Tax Policy Criteria</th>
<th>Summary of Supported Arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>Negative gearing results in a loss of government taxation revenue of approximately $2 billion each year and growing</td>
</tr>
<tr>
<td>Equity</td>
<td>Negative gearing rewards taxpayers on higher marginal rates more than lower income taxpayers</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Negative gearing attracts significantly more loan finance to rental properties than owner-occupied dwellings, and more investment loans are used for negatively geared rental properties than positively geared properties</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Statistics suggest a positive correlation between negative gearing and interest rates, but the relationship is not significant. Further research is required. If negative gearing does affect interest rates then it would also have an impact on the value of the Australian dollar.</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Negative gearing has been linked to declining birth rates, as higher real estate prices lead to increased mortgage commitments for young families. However, there may be stronger factors linked to the decline, including perhaps the increasing proportion of women in the workforce.</td>
</tr>
</tbody>
</table>

Loss of Taxation Revenue
The revenue leakage from negative gearing is significant, estimated at close to $2 billion and rising.

Figure 7 shows there has been an alarming rise in the amount of negative gearing rental losses and in both the number and proportion of rental property investors who take advantage of negative gearing.

Negative gearing has an impact on the revenue comparable to the CGT discount.107

During the 1999 Senate Inquiry into Business Taxation Reform, negative gearing was identified as the largest source of revenue leakage from proposed Ralph capital gains tax reforms (including introduction of the 50% CGT discount). Professor Krever explained to the Inquiry that he expected the tax revenue costs from negative gearing to ‘balloon significantly’ as the mismatch between immediate interest deductions and the taxable portion of capital gains is enormous and so too is the incentive for tax minimisation by negative gearing.108

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107 The CGT discount for individuals and trusts is one of the largest categories of tax expenditure, reported at $2.36 billion. See Department of Communications, Information, Technology and the Arts, Tax expenditures statement 2003, pp.8-9.
CGT exacerbates the revenue leakage problem as negative gearing enables income to be converted to capital. While the revenue loss from negative gearing has the same effect as a tax expenditure, unlike the CGT discount it is excluded from tax expenditure reporting. At first glance, one might query whether this is for political reasons – as the Government is spared the embarrassment of revealing how much this tax shelter really costs. However the official reason for the exclusion is that negative gearing is considered ‘a design feature’ of the Australian tax system. Many Australians may find it difficult, however, to understand why negative gearing qualifies as a design feature of their tax system whereas the CGT discount does not.

Negative gearing has led to a blow out in rental property deductions, leaving the ATO with a revenue leakage problem. The Commissioner of Taxation has on more than one occasion publicly acknowledged the rental property sector as a major tax compliance problem. Frustrated by government policy to protect negative gearing, the ATO has only been able to caution taxpayers with increased audit activity.

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110 In recognition of the cost to the revenue of rental property investments, the current Howard government has announced it will take measures to improve compliance in the area of rental property deductions and capital gains. It has not provided an estimate of the revenue expected to be clawed back in the crackdown. It seems anomalous that the government is seeking ways to crack down on deductions and capital gains in the rental property sector, while at the same time maintain negative gearing as a tax shelter draining billions in revenue dollars. See Treasurer, *Press Release No. 40*, 11 May 2004. Cf. reports from the budget that the Government “plans to steal back more than $1 billion across the board through a crackdown on tax evasion, from big business to individual”, with the ATO to receive $326 million over 4 years to run new audits and reviews: Middleton, K. “Costello Spends up to Woo Middle Australia”, *The West Australian*, Budget04, 12 May 2004, p.2.
In the ATO’s *2004-05 Compliance Program*, the Commissioner observed a growing imbalance between rental property income and deductions. In 2002-03 there was an 8% increase in rental property income but a 13% increase in rental deductions. This imbalance led the ATO to believe there may be significant non-compliance. The ATO response is to carry out around 4,600 reviews and audits of rental income and expenses in 2004-05. However, so long as negative gearing is allowed, it is hard to believe that increased audit activity alone will have any major impact in reversing the revenue loss.

**Equity Argument**

Figure 8 illustrates that negative gearing rewards taxpayers on higher marginal rates more than lower income taxpayers.

**Efficiency Arguments**

One major efficiency argument supported by the statistics is that negative gearing attracts significantly more loan finance to rental properties than owner-occupied dwellings, and more investment loans are used for negatively geared rental properties than positively geared properties.

In a speech given to the Sydney Institute in April 2003, Reserve Bank Governor Ian Macfarlane raised concerns about rising debt due to investor housing. The Reserve Bank carried out a study and found that households that are negatively geared on investment property (and thus declaring a loss on their rental income) are much more likely to have a mortgage, and to have higher leverage when they do have a mortgage. This finding indicates a sub-group of the population is willingly engaging in leveraged asset accumulation, and taking the associated financial risks.

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Statistics indicate a disproportionately high amount of household borrowing is attributable to rental properties rather than owner-occupied dwellings. On analysis, the average rental property is geared approximately two-thirds more than the average owner-occupied property in Australia.\textsuperscript{115}

Figure 9 illustrates the rising proportion of housing finance used for investment properties.

\textbf{FIGURE 9: NEW MONTHLY HOUSING FINANCE COMMITMENTS FOR OWNER-OCCUPIED AND INVESTMENT PROPERTY, BY VALUE, 1985-2004}\textsuperscript{116}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure9.png}
\caption{New monthly housing finance commitments for owner-occupied and investment property, by value, 1985-2004.}
\end{figure}

\textbf{Impact on interest rates and the economy}

There is an authoritatively held view that negative gearing can contribute to overheating in the economy, as was the case in the late 1980s, leading to pressure on the Reserve Bank to raise interest rates. Linked to high levels of debt finance and

\textsuperscript{115} This calculation is based on ratios obtained by comparing statistics on the number of owner-occupied and rental properties, and on the amount of outstanding loans on owner-occupied and rental properties. A figure of 1.6526 is obtained by dividing the ratio of loans (rental vs. owner-occupied) (0.4933) by the ratio of number (rental vs. owner-occupied) (0.2985): Australian Bureau of Statistics, \textit{Media Release 4130.055.001 “More Home Owners have a Mortgage”}, 21 April 2004; Australian Bureau of Statistics, \textit{Catalogue No. 5609.0 “Housing Finance, Australia”}, 12 May 2004; cf. ATO, \textit{Taxation Statistics 2000-01}, Table 5, Part D, which represents the number of taxpayer investors who held rental properties, not the number of rental properties. Some taxpayers held multiple rental property investments. In 1997, for example, just over three-quarters of rental property investors held just one rental property: Australian Bureau of Statistics, \textit{Australian Social Trends 1999}, “Housing – Housing Stock: Rental Investors”. This is comparable to the ratio of 0.2939 at 30 June 1998: Australian Bureau of Statistics, \textit{Catalogue No. 4130.0 “Housing Occupancy and Costs, Australia”}, 15 October 1999.

interest rates, there is a view that an over-investment in assets such as residential property can be harmful to the economy.\textsuperscript{117}

On this view, negative gearing can exacerbate the effects of economic downturns as investors are forced to unwind their debts by cutting back spending.\textsuperscript{118}

However, the relationship between negative gearing and interest rates is a matter of some conjecture. Many hold the view that negative gearing increases demand for housing loans, thereby placing upward pressure on interest rates.\textsuperscript{119}

This theory is supported by the loanable funds view of interest rate determination, under which the supply of loanable funds (savings) and the demand for loanable funds (investment) are brought into equilibrium by interest rate movements. While it is recognised that the state of demand and supply of loanable funds is an important set of influences upon interest rates, there are many other factors.\textsuperscript{120}

At a glance, it is impossible to say to what extent negative gearing affects interest rates. Statistics show a positive correlation between negative gearing and interest rates, but the relationship is not significant.\textsuperscript{121} Econometric research may be needed, first to ascertain the extent to which negative gearing affects the demand and supply of housing finance; and second to ascertain the extent to which the state of demand and supply of housing finance affects interest rates.

The link between negative gearing and the value of the Australian dollar relies on the link with interest rates. Few economists would deny there is a positive relationship between interest rates and the value of a currency.\textsuperscript{122} If negative gearing does increase interest rates and lead to a stronger Australian dollar, it could have a serious impact on trade flows and the economy.\textsuperscript{123}

\textsuperscript{117} May, Alex “Unit Defence” Sydney Morning Herald, 10 April 2003, citing Macfarlane, I.J. (1989) \textit{Money, credit and the demand for debt}, Reserve Bank Bulletin; Senator Andrew Murray, Australian Democrats, Press Release Number 03/423, 13 June 2003; Senator Andrew Murray, Australian Democrats, Press Release Number 03/485, 3 July 2003.


\textsuperscript{119} The correlation coefficient is 0.4675, which is below the statistically significant level (0.707) for the number of data pairs in the series.

\textsuperscript{120} Australia has had a floating exchange rate since 9 December 1983. See e.g. Hughes, B. \textit{et al} (1990) \textit{State of Play 6: the Australian economic policy debate}, Allen & Unwin, Sydney, pp.108-113. In simple terms, when interest rates rise in Australia, for example, but not elsewhere, overseas investors will normally wish to take advantage of the increased return on Australian dollars by moving investments into Australia. This puts upward pressure on the Australian dollar. As investment dollars flow into Australia, there is an arbitrage of currency upwards until equilibrium is reached.

\textsuperscript{121} See e.g. Hughes, B. \textit{et al} (1990) \textit{State of Play 6: the Australian economic policy debate}, Allen & Unwin, Sydney, chapter 5. A stronger Australian dollar would encourage imports but discourage exports. This could lead to higher current account deficits, which would be bad for the economy. It would make it difficult for our exporters, for example, from the resources and agricultural industries. However, a stronger dollar could also have a positive effect on Australia’s capital account. It should make it easier to service our foreign debt and encourage the inflow of investment capital into Australia. This would be good for the economy, especially those who import expensive capital items, such as Qantas and its commercial aircraft.
Declining birth rates
Statistics reveal a declining birth rate in Australia, as indicated in Figure 10.\textsuperscript{124}

The declining birth rate has an impact on government policy and reform of the tax system.\textsuperscript{125} Some also consider the relationship works in the other direction, in that birth rates can be affected by government policy and by the design of the tax system.

In his 2004-05 Budget, Treasurer Peter Costello announced measures to provide greater financial encouragement for Australians to have more children.\textsuperscript{126}

\textbf{FIGURE 10: BIRTH RATES IN AUSTRALIA, PER CAPITA, PER ANNUM, 1997 – 2003}

Apart from more obvious incentives such as monetary assistance provided by the Government under its family payment package, it is necessary to look deeper into the Australian tax system to consider the impact of design features, such as negative gearing, on birth rates.

Negative gearing has been linked as a contributing factor to the declining birth rate, on the basis that higher real estate prices lead to increased mortgage commitments for young families.\textsuperscript{127} Insofar as this argument turns on the effect of negative gearing on household debt and interest rates, this appears to be a sound argument. However, statistically the relationship is unproven, and there may be stronger factors linked to this decline, such as the increasing number of women in the workforce.\textsuperscript{128}

\begin{figure}[h]
\centering
\includegraphics[width=0.7\textwidth]{birth_rates.png}
\caption{Birth Rates in Australia, per Capita, per Annum, 1997 – 2003}
\end{figure}

\begin{itemize}
\item[\textsuperscript{124}] Australian Bureau of Statistics, \textit{Catalogue No. 3101.0} “Australian Demographic Statistics”, 18 March 2004. The rate shown in the graph below for the 2003* year is annualised from available 2003 March, June and September quarter data.
\item[\textsuperscript{125}] See e.g. Review of Business Taxation, \textit{A Tax System Redesigned}, Report, July 1999, pp.9-10.
\item[\textsuperscript{126}] Treasurer, \textit{Budget Speech 2004-05}, 11 May 2004 (e.g. increased maternity payment and family tax benefit). There appears to be some merit in encouraging breeding, given Australia’s ageing population, as more taxpayers will be needed in the next 10 to 20 years as baby boomers move into retirement. See McIntosh, G. (1998) \textit{The Boomer Bulge: Ageing Policies for the 21st century}, Research Paper 4, 1998-99, Statistics Group, Parliament of Australia, Canberra, 24 November 1998.
\item[\textsuperscript{127}] Hanegbi, R. “Negative Gearing: Future Directions” (2002) 7 Deakin Law Review 349, 357.
\end{itemize}
INTERNATIONAL COMPARISONS

Australia is one of few countries that allow negative gearing on real estate and other investments. Few of the major OECD nations allow a tax shelter for negatively geared rental properties, as many have enacted measures to quarantine and restrict interest deductions on investment properties.¹²⁹

<table>
<thead>
<tr>
<th>Country</th>
<th>Is negative gearing allowed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Yes</td>
</tr>
<tr>
<td>Japan</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Yes</td>
</tr>
<tr>
<td>United States</td>
<td>Restricted</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Restricted</td>
</tr>
<tr>
<td>Netherlands</td>
<td>No</td>
</tr>
<tr>
<td>Sweden</td>
<td>Restricted</td>
</tr>
<tr>
<td>Germany</td>
<td>Restricted</td>
</tr>
<tr>
<td>France</td>
<td>Restricted</td>
</tr>
</tbody>
</table>

A comparison of international quarantining measures

Negative gearing is not permitted in the U.K. and the Netherlands. Interest deductions are restricted in the U.S., Sweden, Germany, France and Canada. There is not a high degree of uniformity or overlap of approach to the quarantining of interest deductions overseas. The overseas measures are compared below. In general, while a fairly broad approach is applied in the U.S. (with passive investment rules) and a somewhat narrower approach applies in the U.K. (where investment income is quarantined under a specific schedule), in most countries rental income is given quite specific tax treatment that differs from other jurisdictions.

Little comment needs to be made in relation to Japan¹³¹ and New Zealand,¹³² which like Australia allow negative gearing on investment housing. However, it may be noted that previously in New Zealand the Commissioner for Inland Revenue denied negative gearing on rental properties by administratively quarantining the interest

¹²⁹ See e.g. Senator Andrew Murray, Australian Democrats, Press Release Number 03/485, 3 July 2003.
deduction to the amount of net rental income.\textsuperscript{133} This administrative quarantine no longer applies.

The U.S. has an extensive system of limitations on deductibility, including ‘passive activity loss’ rules.\textsuperscript{134} While interest is generally deductible,\textsuperscript{135} there are notable limitations.\textsuperscript{136}

Rental income is treated as passive income. Unless the individual actively participates in the rental activity, losses from rental property may be limited. Individuals who actively participate in the rental activity may be able to deduct up to $US25,000 of loss against other income. No additional loss is available for individuals whose modified adjusted gross income exceeds $US150,000.\textsuperscript{137}

Interest is only deductible on rental properties to the extent it does not exceed the taxpayer’s net investment income,\textsuperscript{138} however the excess may be carried forward up to 20 years and offset against future net investment income. Alternatively it can be offset against capital gains realised on the sale of U.S. real estate.\textsuperscript{139}

The U.K. adopts a schedular system to quarantine deductions for investments. Losses from one activity source can only be offset against future income from the same source. Rental property losses are quarantined to income from real property under Schedule A.\textsuperscript{140}

Whereas each Schedule and Case has its own detailed expense rules, generally expenditure may be deducted if it is incurred wholly and exclusively in gaining income that is \textit{prima facie} liable to income tax. Losses and outgoings of a capital, private or domestic nature are expressly excluded from deductibility. Each Schedule and Case has its own loss rules. Generally there is no facility to set off a loss under one Schedule against income from another, with a notable exception for losses incurred in a trade, profession or vocation (assessable under Schedule D, Cases I and

\textsuperscript{133} Losses incurred on certain tax shelter activities (including rental investments) in excess of a threshold ($10,000) were not deductible against income from other sources in the same income year: CCH, 1992 \textit{New Zealand Master Tax Guide}, CCH, Auckland, pp. 304-8; and other provisions permitted the ‘claw-back’ of certain deductions previously allowed by subjecting to tax an amount equal to the lesser of the profit from the sale of the relevant property and the total of the deductions allowed where that property is sold within 10 years of acquisition: see e.g. Treasurer (1985) \textit{Reform of the Australian Taxation System: Draft White Paper}, AGPS, Canberra, p.51.

\textsuperscript{134} These rules were adopted in response to the widespread use of tax shelters in the 1970s and 1980s. They restrict the deductibility of losses that arise in any activity in which the taxpayer does not ‘materially participate’. This has been administratively construed to require the taxpayer spend at least 500 hours per year on the activity. While there are a number of other situations that satisfy material participation, special rules apply to real estate activities. See e.g. Ault, H.J. et al (1997) \textit{Comparative Income Taxation: A Structural Analysis}, Kluwer Law International, London, p.245.

\textsuperscript{135} \textit{Internal Revenue Code}, sec.163(a).


\textsuperscript{138} \textit{Internal Revenue Code}, sec.163(d).


II). Otherwise, except for losses from employment (for which there is no provision), income losses can generally be carried forward indefinitely but can only be offset against future income from the same source.\textsuperscript{141}

In Canada interest is not generally deductible as it is considered a capital expense for income tax purposes.\textsuperscript{142} Interest can be deducted in limited instances where income is gained from a business or property.\textsuperscript{143}

The prospect of a capital gain alone will not be sufficient to make interest expenditure deductible, however if there is a reasonable possibility that the investment will eventually generate ordinary income in excess of the interest expense, a deduction for the interest will normally be allowed. Specific restrictions apply to certain real estate investments. For example, interest incurred during construction of a building is capitalised and added to the cost of the building, and taken into account when the building begins to generate an income stream or when it is sold, not when the expense is incurred.\textsuperscript{144}

There are also rules designed to prevent passive investors from sheltering income from losses.\textsuperscript{145}

Under case law in Canada, a rental property is not normally considered a business in the hands of an individual unless extended services, substantially beyond the mere provision of space, are provided. Where the rent constitutes business profit, net income is computed by including the right to deduct interest and depreciation. However, rental income will usually be defined as ‘specified investment business income’ rather than active business income.\textsuperscript{146}

In the Netherlands, there are no general restrictions on using losses from one income category to offset against income from any other category.\textsuperscript{147} However, for interest to be deductible in computing net rental income, the real estate must be part of a business operation for a private individual.\textsuperscript{148} Normally this requirement will not be satisfied for rental properties.

In Sweden a credit is allowed for losses in respect of income from capital at a rate of 30% for losses up to $15,000 which can be offset against income from other

\textsuperscript{142} Cf. Frankovic, J. “Why Interest should be Considered a Current Expense” (2001) 49(4) Canadian Tax Journal 859.
\textsuperscript{143} Income Tax Act, sec.18(1)(b)&(c) and sec.20(1)(c); CCH, 2002 International Master Tax Guide, CCH Australia Limited, Sydney, CAN ¶1-100 and CAN ¶3-060.
\textsuperscript{144} Income Tax Act, sec.18(3.1); Frankovic, J. “Why Interest should be Considered a Current Expense” (2001) 49(4) Canadian Tax Journal 859, 870.
\textsuperscript{145} CCH, 2002 International Master Tax Guide, CCH Australia Limited, Sydney, CAN ¶3-060
categories. For losses in excess of $15,000 the credit rate is 21% and is restricted to current year losses where the gain on the investment is deferred.\textsuperscript{149}

In Germany rental income is one of seven income categories.\textsuperscript{150} Losses can be carried forward against future income or offset against previous income, but a limit applies to the amount of losses that can be carried back.\textsuperscript{151} Losses in particular income categories can generally be applied against income in other categories.\textsuperscript{152}

In France there are separate categories of income. Restrictions apply to certain categories of losses. For real estate losses, the first €10,700 can be set off against other income, but to the extent it arises from interest outgoings, it must be amortised over a 10 year period against future rental income. The excess losses over €10,700 not due to interest paid may only be carried forward against future rental income for a maximum period of 5 years.\textsuperscript{153}

Rental income in France is not subject to withholding tax and is assessable with other income as declared in the annual tax return, although it must be returned in a special schedule attached to the tax return. A restrictive list of expenses can be deducted against rental income, which includes interest expenses related to acquisition costs and finance expenses.\textsuperscript{154}

**HOW SHOULD INVESTMENT LOSSES BE QUARANTINED IN AUSTRALIA?**

Given that Australia has had negative gearing for the better part of the last half-century, how can negative gearing be reliably quarantined?

As can be seen from the above international discussion, losses can be quarantined in a variety of ways – on an entity basis, on a time basis, and on the basis of category of income or gain against which the loss can be offset.\textsuperscript{155}

The most severe approach to quarantining, which existed in the provision we had affecting interest deductions for real estate investments between 1985 and 1987, is to deny a deduction outright to the extent it exceeds assessable income from the asset. Yet it would not seem a fair result for expenditure incurred to produce income, whether in the form of a revenue or capital gain, to fall into a black hole by permanently excluding it from the determination of tax liability (i.e. as a deduction or in CGT cost base) to the extent no income is actually derived from the investment.

From a tax policy point of view, the quarantining of losses from the negative gearing of investment assets may be considered in the wider context of our CGT regime.


Similar arguments apply to the quarantining of interest deductions on investment assets and the concessional CGT treatment in Australia. For a quarantining model, consideration may also be given to the way our CGT regime restricts the offset of capital losses only against capital gains.\(^{156}\)

One of the reasons the government gave to justify repeal of our quarantine provisions in 1987 was that negative gearing was adequately countered by measures such as the CGT regime. With the effluxion of time this justification appears doubtful. The fact that capital gains are subject to taxation in Australia at best provides only a part answer, since capital gains are taxed concessionally in Australia compared with most other sources of income. This arises because capital gains are taxed on a deferred, realisation basis, and is also due to the availability of exemptions and concessions such as the general CGT discount.

A case can be made for tying our approach to quarantining with our CGT regime. Few people choose to invest with the purpose of making a loss, although that is always a risk of most investments. Investment assets are acquired for the purpose of producing income, whether as a stream of revenue from year to year, such as rent or dividends from shares, or as a capital gain on disposal of the investment, or a combination of the two. The taxing provisions should take into account the fact a taxpayer’s return on an investment can take a combination of revenue stream and capital gain and adjust the deduction of losses accordingly.\(^{157}\) At the same time the provisions should not penalise an investor who makes a loss overall, when considering both the revenue stream and the proceeds of sale on disposal.

**Three Approaches for Quarantining Interest Deductions on Investments**

It could be argued that rental (or other investment) losses attributable to interest expenditure in excess of net rental income do not have the required nexus with other income derived by the taxpayer in the current year. Rather, they have a stronger connection to either future net rental income from that investment and ultimately, if no future net income is derived from the investment to offset the net rental losses, the assessable income attributable to any capital gain realised from the investment.

Three different approaches to quarantining reflecting this proposition are detailed below. Each approach will also have its own transitional issues as well as long-term costs and benefits.

1. **Asset by Asset Approach**
   Quarantining could apply at the strictest level, on an asset-by-asset basis. The most severe approach, and the one repealed in 1987, would be to deny the revenue loss from the investment outright any year.

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\(^{157}\) Consider the ATO and Government policy position on the requirement to apportion interest deductions for capital protected loan products used by share investors indicated in Assistant Treasurer Press Release ‘Taxation of Capital Protected Products’, 30 May 2003 and Taxation Determinations TD 2005/4 to TD 2005/7, 30 March 2005. Efficiency arguments suggest a more consistent and principled approach could be taken across all investments to require the apportionment of interest expenditure between income production (deductible under sec.8-1 to the extent that income is produced) and capital (included in cost base for CGT purposes).
A less severe approach would be to allow such a loss to be carried forward and offset against any net income from that specific asset in later years. Ultimately, any accumulated losses on that property carried forward to the time it is sold could be applied against the capital proceeds in determining the capital gain (prior to applying the general CGT discount) realised on that asset.

This quarantining approach could apply to CGT assets on an asset-by-asset basis. Options to consider include whether to allow the accumulated losses to give rise to a capital loss on disposal of the asset or whether to allow such losses to only reduce a capital gain to nil and then allow any balance as a deduction on revenue account against any other income or category of income derived by the taxpayer. Consideration could also be given whether to exclude CGT exempt assets from this quarantining.

2. All Investment Assets Approach
At the other extreme, the broadest approach to quarantining interest deductions would be to allow the net income and losses from all investment assets of the taxpayer each year (this could be defined as all CGT assets) to be pooled together to determine the taxpayer’s overall net investment income. An overall net loss for an income year could be carried forward and offset against net investment income in future years.

Under this broad approach, given the possibility of the taxpayer has a range of investment assets, one might question what should happen to any accumulated investment loss at the time of disposal by the taxpayer of their assets.

The simplest option under this approach would to do nothing, that is not require any of the accumulated loss to be offset against capital proceeds, but allow the accumulated loss to be carried forward indefinitely until future investment income is derived.

Another option under this approach may be to require the taxpayer to offset any accumulated investment losses against any capital gains from any investment asset as they arise in any year (but only to the extent of eliminating the capital gains and not to give rise to capital losses). This may have the unintended consequence of encouraging the deferral of capital gains as it would be more valuable to the taxpayer to offset the accumulated loss against revenue gains.

A more complex option under this approach would be to require the taxpayer to keep a record of the net losses accumulated from each of the investment assets and apportion part of the accumulated loss back to an asset when it is sold, to be offset against any capital proceeds from that asset to determine the capital gain or loss from the asset.

3. Pooling Assets Approach
A middle approach to quarantining interest deductions on investment assets is to pool assets according to category of investment. Under this approach, income and losses from investments in each category (such as ‘real estate’ or ‘share/equity’ investments) would be pooled together each year to determine the overall net income or loss in each category. All categories with net income would be included in the taxpayer’s assessable income. A net loss in a category can be carried forward and offset against net income in that same category in a later year. This approach would require an added layer of legislation to define each investment category. This approach could be implemented with similar effect to a schedular system (such as that implemented in
the U.K., France or Germany) or in a similar way to the quarantining “passive investment” rules in the U.S.

Again, an issue may arise as to how to deal with accumulated net losses when assets within the category are sold. Again, the easiest option would be to do nothing. Thus the accumulated losses would not have to be offset against capital proceeds. Another option would be to require the taxpayer to offset any accumulated investment losses in that category against capital gains on investments in that same category as they arise in any year. This would only apply to the extent of eliminating the capital gains and not give rise to any capital losses. A more complex option would be to require the taxpayer to keep a record of the net losses accumulated from each of the investment assets in the category and apportion part of the accumulated loss back to an asset in that category when it is sold, to be offset against any capital proceeds from that asset to determine the capital gain or loss from the asset.

Efficiency Arguments and Quarantining

Efficiency is arguably the main tax policy criterion to consider when comparing the quarantining approaches.

What economic distortions would arise in Australia if government reintroduced quarantining measures to deny negative gearing. While this may depend on the precise type of quarantining measures enacted, if confined to rental investments this could create a bias in favour of other investments. The solution is not necessarily to extend quarantining to all types of investment. Doing that might well remove bias in choice of investment but consider what impact, if any, it would have on the overall level of investment in the economy. Would it have a serious effect on corporate capital formation?

In relation to the criterion of efficiency, all three approaches to quarantining outlined above – the “asset-by-asset” approach, the broad “all investment assets” approach, and the “pooling of assets” approach – are compatible. None discriminate between categories of investment, although the potential for this lies under the pooling approach (this possibility is clear from overseas experience). They all provide for uniformity in tax treatment of the interest costs for all types of investments and therefore would overcome the major justification by the government for removal of quarantining in 1987.

However, by avoiding the criticism that each quarantining measure could discriminate between different types of investment, all three approaches are potentially exposed to a broader efficiency based criticism. By deferring and ultimately denying the excess interest deductions, it might be argued that they discriminate against all investments, and in particular appreciating types of investments, i.e. assets expected to provide a return weighted more from a capital gain than from an income stream. While full interest deductions could be claimed on deprecating assets used in income production, interest deductions would generally be denied on appreciating assets to the extent they exceed income from those assets.
On the other hand, some may consider this distortionary effect to be desirable from the point of view of counterbalancing the distortion already built into our capital gains tax system in favour of passive, appreciating assets.¹⁵⁸

This broader efficiency argument does not apply equally to each of the above three approaches. The greatest level of quarantining, with the greatest scope for deferral and conversion to capital account (for offset against capital gains) applies under the “asset by asset” approach. As a result, that approach would be expected to have the strongest impact in reducing the tax revenue lost to negative gearing and potentially the strongest impact in distorting investment away from appreciating assets.

The broader “all investment assets” approach would be expected to have the weakest impact on plugging the tax shelter and distorting investment away from appreciating assets because any investment losses from one asset could be offset against income from other investment assets in the same income year and, if necessary, future income years. Depending on the taxpayer and their mix of investments, there could be very little deferral of the negative gearing losses. However, by preventing the taxpayer from applying the losses against other sources of income, and mitigating the accumulated effect of continued losses from negative gearing from year to year, at least some of the revenue leakage arising from negative gearing could be prevented. It is anticipated this approach would give rise to the least conversion of the losses to capital account to be offset instead against capital gains.

The approach of “pooling assets” according to category of investment would be expected to produce an outcome somewhere between the other two more extreme approaches in deferring the point in time of utilising those investment losses and the possibility of converting those losses to capital account for offset instead against capital gains.

The final point to consider on the efficiency criterion is the question of international tax neutrality. The middle “pooling” approach appears the method most consistent with the quarantining measures adopted by the major OECD nations. Some might therefore seek to argue that the “pooling” approach has the advantage of providing greater harmony for our income tax system internationally. These considerations should not be underestimated in an increasingly globalised economic system. At the margin, this has the potential to make Australia more internationally competitive by promoting greater tax neutrality and encouraging the free flow of international investment.

_Equity and Quarantining_

In relation to the tax policy criteria of equity, to the extent that negative gearing widens income inequality, vertical equity would be best served by the strictest quarantining approach (asset by asset) and least by the broadest approach (all investment assets). Horizontal equity is served well by all three approaches, as they all apply the quarantine broadly across all investment (CGT) assets.

None of the three approaches address the cumulative distributional inequality arising from decades of allowing the tax shelter. However, query whether any quarantining measure could adequately reverse this effect in any event?

Simplicity and Compliance Costs

Which of the three approaches would best serve the criterion of simplicity?

While all three approaches would be expected to add some complexity to an already complex system of taxation of income and capital gains, the complexity of each approach would appear to depend mostly on which option is taken in requiring the losses to be converted over to capital account and deferred for offset against realised capital gains.

The simplest method for taxpayers is probably the outright denial of interest deductions in excess of net investment income under the “asset by asset approach”, similar to the quarantining measures we had in place for real estate investments between 1985 and 1988. An outright denial of excess interest under the “pooling” approach would be marginally more complex than the “all investment assets” approach, owing to the need to divide specific investments between defined categories.

Under the asset by asset and pooling approaches, the compliance cost burden on taxpayers, encompassing both “pure” and “social” compliance costs,159 would increase as the number and variety of investments increases. Assuming many of these costs are deductible, an interesting question arises whether those costs should be deductible against any other assessable income of the taxpayer or quarantined to each investment or category of investment.

The level of complexity and compliance burden on the taxpayer also increases where deferral and conversion over to capital account is required. It appears the greatest burden would arise under the “pooling” and “all investment assets” approaches where the taxpayer is required to keep a record of net losses accumulated from each of the investment assets in each category and apportion part of the accumulated loss back to an asset in that category when it is sold, to be offset against any capital proceeds from that asset to determine the capital gain or loss from the asset.

The Politics of Quarantining

Tax policy is not just about tax policy criteria. A clear lesson from the number of failed proposals emanating from Ralph Review of Business Taxation is that it is impossible to ignore the political context and the likelihood of a proposed tax reform being accepted. Would different political consequences arise for each of the three quarantining approaches? Consider which approach would be the least unpopular with voters?

For many investors the rental property has become the repository for their retirement savings, instead of superannuation, as a sound base for wealth generation. To deny such investors the tax subsidy offered by negative gearing may bring about the need for some of these investors to consider alternative, more tax effective forms of investment for retirement. Any quarantining measure would therefore not be expected to be popular among any investors.

An asset-by-asset approach that targets rental property investment alone would be expected to receive the most opposition from the 1.3 million plus taxpayers who

declare rental income. On the other hand, the ability to offset unused interest deductions against capital gains on sale of the property could make the measures more palatable to such voters.

If quarantining applied asset-by-asset but across all CGT assets, rental property investors may well feel less targeted and so it may attract less resistance from these voters. Yet most if not all investors would be caught by these measures, and few would be agreeable to the additional cost to investment from removal of the tax subsidy as well as the increased complexity in administering their tax on investments. Quarantining would make the tax treatment of investment more complex at a time when many already perceive CGT as too complex and costly to administer.

A pooling assets approach, according to category of investment (such as the schedular approach applicable in the U.K.), would not give as much opportunity for investors to continue to utilise interest deductions and offset investment losses against other income as the all investment assets approach, but would give greater scope for this than the asset-by-asset approach. However, more complexity and compliance costs in record keeping would follow from the pooling approach, as well as the possibility for dispute arising from definitional problems as to whether an asset falls for treatment under a particular category, especially if there are a number of different categories of investment and tax treatment differs in each category.

An all investment assets approach would be expected to have the greatest chance of acceptance among investors and voters, as it would give them the greatest opportunity to utilise and offset rental property and other investment losses. Additional record keeping and compliance costs could weigh against this approach, depending on which specific option is taken, but to a lesser extent perhaps than the pooling approach.

**Legislative Amendment for Quarantining**

All three approaches can be tied in with our existing capital gains tax provisions, which already provide for the inclusion of non-capital expenditure, incurred by a taxpayer in connection with the continuing ownership of an asset, in the asset’s cost base for the purposes of calculating CGT liability. Sec.110-25(4) of the *Income Tax Assessment Act 1997* includes such non-capital costs in the third element of the cost base of a CGT asset, except to the extent that the expense is deductible. This includes interest on money borrowed to acquire an asset.

Under the asset-by-asset approach, little legislative amendment to the CGT provisions would be needed. Net investment losses, comprising carry forward interest expenditure, could be accumulated and included in cost base of the CGT asset and offset against capital proceeds realised on sale of the investment.

The main amendment that would be required under the asset-by-asset approach is to include a provision in the income tax legislation limiting the deductibility of interest to the amount of net income from the asset and allowing for carry forward and deferral. Legislatively, this quarantine could be limited to CGT assets, as defined in sec.108-5. Thus a provision could be included under Division 36 stating that interest deductions on money borrowed to acquire or hold a CGT asset cannot give rise to a loss in any income year but can be carried forward and applied against assessable income derived
from that asset in a later income year. This approach implies a stricter level of tracing to income from the asset than the other two quarantining approaches.\textsuperscript{160}

Given that the mischief of the tax shelter of negative gearing is a tax saving for individuals, a decision could be made to limit the appropriate quarantine measures to individual taxpayers. Losses made by other entities are subject to their own rules for carry forward in any event.\textsuperscript{161}

The accumulated balance of such losses carried forward when a CGT event arises for that asset may be treated as a non-capital cost of ownership of that asset and included in the third element of the cost base of the asset. If appropriate, certain types of CGT assets, e.g. personal use assets, collectables, motor vehicles or exempt assets, and other assets such as trading stock and other business assets, could be excluded from this quarantining.

The other two approaches are expected to be more complex and more difficult to practically enforce, both in the provisions limiting the deductibility of interest and providing for deferral of the deductions and in the amendments required to the CGT provisions, depending on the choice of option requiring the conversion of the losses to capital account. The simplest option under both approaches would be to not allow any conversion of the losses to capital account.

Under the “all investment assets” approach, assuming a conversion to capital account is to be allowed, the accumulated loss would need to be apportioned to each individual asset when they are sold and that part converted to capital account and offset against the capital proceeds.

Under the “pooling” approach, the deductibility and deferral provisions in the income tax legislation would need to define and regulate each category of investment for deductibility of the interest. Assuming a conversion to capital account is to be allowed, the amendments to the CGT provisions would be a little more complex, to deal with the conversion of pooled accumulated losses according to each investment category into amounts to be offset against capital proceeds either on the basis of each individual asset or on a pooling of CGT assets according to each category of investment.

Given that the mischief of the tax shelter is a tax saving for individuals, a decision could be made to limit the appropriate quarantine measures to individual taxpayers. Losses made by other entities are subject to their own rules for carry forward in any event, although quarantining does not apply on an asset-by-asset basis.\textsuperscript{162} Therefore limiting the measures to individuals could fuel argument based on the efficiency


\textsuperscript{161} Refer to Schedule 2F of the \textit{Income Tax Assessment Act 1936} (trust loss measures); Divisions 165, 170 and 175 (losses made by companies); and the table under sec.36-25 indicating the special rules about tax losses.

\textsuperscript{162} Schedule 2F (trust loss measures) and Division 36 (losses made by companies) of the \textit{Income Tax Assessment Act 1936}. 

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criteria that they discriminate against individuals and distort the choice of investor decision (in particular who is to obtain finance for the investment) away from individual taxpayers and towards other entities.

**Recommendation**

This paper recommends that Australia adopt an “asset by asset” approach to quarantining because it provides the strongest solution for closing the tax shelter. At the same time, it is expected to give rise to the least complexity and compliance burden on taxpayers and probably requires the least legislative amendment. While no quarantining approach is expected to be politically popular, an asset-by-asset approach may well be seen as more politically acceptable than the pooling approach, but less popular than the all investment assets approach, which gives the greatest opportunity for using and offsetting investment losses.

**CONCLUSIONS**

Both critics and supporters of negative gearing have based their arguments primarily on two critical assumptions. One is that negative gearing has increased house prices. The other is that negative gearing has increased housing stock. Both assumptions are misguided.

In relation to house prices, in the absence of statistical correlation, the better view is that house prices rise anyway, regardless of negative gearing, and can be explained by other factors.

In relation to housing stock, although statistics indicate that negative gearing has led to an increase in real estate investment, they contradict the argument that negative gearing has led to an increase in the number of dwellings.

Arguments based on these false assumptions are flawed. There is no empirical foundation for arguing in support of negative gearing that it rewards home ownership or that it results in lower rents or increased activity in the construction industry.

Ultimately there is no compelling policy reason why Australia should continue to retain the tax shelter. Negative gearing results in a significant loss in government revenue, measured in billions of dollars. In return it has provided few indisputable benefits. It appears that negative gearing has increased income inequality, and statistics also support the conclusion that it has had a major effect on housing finance, with a disproportionately high level of housing finance invested in rental properties. Its effect on interest rates is debatable and further research is needed.

How best to remove the tax shelter, and whether Australia has the political will to deal with the issue, is also a matter for debate. Having regard to ongoing concerns about investment neutrality, the quarantining of interest deductions should apply to all investment assets, not just rental properties. The recommended approach for Australia is a specific “asset by asset” approach to quarantine interest deductions. Losses arising from interest expenditure in relation to CGT assets (investments) should be allowed to be carried forward against future net income from the same asset and ultimately against capital gains arising on a CGT event happening to that asset.

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163 See e.g. ACOSS “Taxation in Australia: Home Truths and International Comparisons” *ACOSS Info 347*, June 2003, p27 (Recommendation 4).
This promises the strongest solution for closing the tax shelter. At the same time, it is expected that this approach would probably be the most practically enforceable, requiring the least legislative amendment and giving rise to the least complexity and compliance burden on taxpayers. Whether it would be politically acceptable is another matter entirely.
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GST and the changing incidence of Australian Taxes: 1994-95 to 2001-02

Neil Warren, Ann Harding and Rachel Lloyd

Abstract
The past decade has seen major reforms to the design of Australia’s tax system. This paper outlines these reforms and examines their distributional impact across the household income spectrum.

While the authors estimated tax incidence in Australia prior to the July 2000 (ANTS) reforms (which included the introduction of a 10% GST), no comprehensive estimates of the impact of these tax reforms have been made since that date. This paper addresses this deficiency.

It finds that the personal income tax has become more income redistributive and more progressive over the period 1994-95 to 2001-02. However, the broad-based indirect tax reforms implemented over this period have become marginally more regressive and, because they have become more important as a revenue source, they now impact more adversely on post-tax income distribution. In the case of taxes other than the personal income tax and the reformed indirect taxes, they have become less regressive and have increased in importance. Overall, the progressivity of the Australian tax system and the distribution of post-tax income appears to have remained remarkably stable over the period.

INTRODUCTION
The past decade has been characterised by major changes to the Australian tax system. This has not just been confined to taxes levied by the Commonwealth. State governments have also implemented major reforms. These include the repeal of many of their financial taxes (in return for a share of the GST revenue) and the loss, following a Constitutional challenge, of their Business Franchise Taxes in 1997.

This has all occurred during a period of unprecedented economic growth. An important policy question then becomes how these Commonwealth and State changes to the tax system have impacted on households over recent years.

Interesting as this question is, it is not simply answered. After all, governments impact on the citizenry in a multitude of ways other than just through the tax revenue raised. Even if our focus was just on taxation, then there might also be a case for examining the costs of imposing and collecting these taxes - including the impact of distortions (or deadweight loss) arising from the taxes. Equally, there might also be a case to consider the impact of changes in tax-expenditures (or tax concessions). Similarly, an important issue is whether any of the tax changes were offset by government expenditure changes and whether there have been changes in regulations that might impact on the financial welfare of individuals.
Ultimately, in order to obtain a complete picture of the impact of government on its citizenry over a period of time, the impact of all aspects of government on the community would need to be considered.

It is to this end, that the authors are undertaking a series of studies into those elements that contribute to changes in fiscal incidence in Australia over the past decade. Harding, Lloyd and Warren (2004, 2005) examine the incidence in 2001-02 of the personal income tax, a limited range of Commonwealth indirect taxes, social welfare payments and a range of government social expenditures.

The purpose of this paper is to extend the tax component of the above studies and estimate changes in the incidence of almost all tax revenue raised in Australia between 1994-95 and 2001-02 for which we have sufficient data to simulate incidence. Initial attention is given to outlining the broad reforms introduced over this period (which are more fully outlined in Warren (2004)). No study of changing tax incidence can be undertaken without consideration of how these changes are impacted by economic, social and demographic changes over the period of study - and it will be to this issue that we turn in third section. The fourth section provides an overview of the methodology adopted. The fifth section examines the change in gross income distribution over the period studied. The sixth section presents estimates of the changing incidence of taxes which is followed by an analysis of the impact these taxes have on income distribution and the progressivity of the overall tax system. The final section examines areas for further research.

**OVERVIEW OF TAX REFORMS BETWEEN 1994-95 AND 2001-02**

The current Australian Commonwealth Government was first elected on 2 March 1996. The elected Prime Minister, John Howard MP, had always shown great interest in tax related issues, especially while Treasurer in various Liberal Governments in the 1970s and early 1980s. It was therefore not surprising that tax reform soon became a focus when he assumed the Prime Ministerial position. In October 1996, the Australian Chamber of Commerce and Industry (ACCI) sponsored a National Tax Summit, which released a final communiqué presenting unified and strong support for tax reform across a range of industry and community organisations. By the end of 1996, calls for tax reform were receiving broad community and business support. On 25 May 1997, the Prime Minister announced that a taxation taskforce would be formed to report to government on the options for tax reform within three months. The Tax Reform Consultative Task Force was chaired by Senator Brian Gibson and provided the avenue for public comment to flow through to the Treasury Taskforce.

In August 1998, the Government released Tax Reform, Not a new tax, a new tax system (which became known as ANTS). This included recommendations to introduce a GST, personal income tax cuts, welfare system changes, entity taxation and a number of other business tax reforms.


Since 1998, the pace of tax reform in Australia has been frenetic. The tax reform timeline below provides a brief overview of the sequencing of actual reforms implemented but does not include the many other reform proposals which did not find implementation.\textsuperscript{281} With the GST revenue being assigned to general purpose Commonwealth grants to the States, the opportunity was also taken to use the GST revenue to fund the repeal of a number of inefficient State taxes.

The strategy mapped out in ANTS did not find easy nor comprehensive implementation. The changes to business income taxation were deferred for further consideration by the Review of Business Taxes (RBT).\textsuperscript{282} The passage of the GST through Parliament was tortuous. The GST legislation was first tabled in the Commonwealth Parliament on 2 December 1998 but stalled in the Senate until an agreement with the Democrats on 28 May 1999 which resulted in the removal of basic foods from its base. It finally passed through both Houses of Parliament on 8 July 1999 and was given Royal Assent on 29 July 1999. This was just 11 months before its introduction on 1 July 2000. Amendments were also made to the Wholesale Sales Tax (WST) on 29 July 1999 to reduce the WST rate on goods subject to the 32\% rate to 22\% (except for furs and jewellery).

<table>
<thead>
<tr>
<th>TABLE 1 MAJOR TAX REFORMS: 1982 TO 2002-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction of Diesel Fuel Rebate Scheme (DFRS)</td>
</tr>
<tr>
<td>Introduction of CPI indexation of excise</td>
</tr>
<tr>
<td>Introduction of petroleum resources rent tax</td>
</tr>
<tr>
<td>Introduction of FBT</td>
</tr>
<tr>
<td>Introduction of CGT</td>
</tr>
<tr>
<td>Full imputation for company tax</td>
</tr>
<tr>
<td>Gold mining tax exemption abolished</td>
</tr>
<tr>
<td>State Business Franchise Taxes unconstitutional; replacement with Commonwealth excise surcharge</td>
</tr>
<tr>
<td>Release of ANTS I</td>
</tr>
<tr>
<td>Release of ANTS II (Basic Foods removed from GST base and income tax cuts reduced)</td>
</tr>
<tr>
<td>Introduction of CGT 50% discount, abolition of indexation &amp; averaging</td>
</tr>
<tr>
<td>Introduction of tobacco per-stick excise arrangements</td>
</tr>
<tr>
<td>Abolition of Wholesales Sales Tax</td>
</tr>
<tr>
<td>Abolition of State Accommodation Taxes</td>
</tr>
<tr>
<td>Adjustment of fuel and alcohol excise rates for GST</td>
</tr>
<tr>
<td>Introduction of Diesel and Alternative Fuel Grant Scheme (DAFGS)</td>
</tr>
<tr>
<td>Introduction of the Wine Equalisation Tax (WET) and Luxury Car Tax (LCT)</td>
</tr>
<tr>
<td>Abolition of FID</td>
</tr>
<tr>
<td>Abolition of stamp duty on share transactions</td>
</tr>
<tr>
<td>Abolition of fuel indexation (effective August 2001)</td>
</tr>
<tr>
<td>Introduction of consolidation regime</td>
</tr>
<tr>
<td>Introduction of National Excise Scheme for Low Alcohol Beer</td>
</tr>
<tr>
<td>Excise and customs duty introduced on fuel ethanol</td>
</tr>
<tr>
<td>Replacement of DFRS &amp; DAFGS with Energy Grants (Credits) Scheme</td>
</tr>
<tr>
<td>Excise and customs duty introduced for biodiesel</td>
</tr>
</tbody>
</table>

Source: Warren(2004), Table 4.1

\textsuperscript{282} See <www.rbt.treasury.gov.au>
### Table 2: Tax Revenue: 1994-95 and 2001-02

<table>
<thead>
<tr>
<th>Type of tax</th>
<th>1994–95</th>
<th>2001–02</th>
<th>Change</th>
<th>Reformed Indirect Taxes (as separately identified in this study)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Taxes on income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income taxes levied on individuals</td>
<td>54,635</td>
<td>87,250</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Income taxes levied on enterprises(a)</td>
<td>17,351</td>
<td>31,782</td>
<td>83%</td>
<td></td>
</tr>
<tr>
<td>Income taxes levied on non-residents</td>
<td>777</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>72,763</td>
<td>119,032</td>
<td>64%</td>
<td></td>
</tr>
<tr>
<td><strong>Employers payroll taxes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General taxes (payroll tax)</td>
<td>6,394</td>
<td>9,415</td>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>Selective payroll taxes (stevedoring industry charges)</td>
<td>64</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other employers labour force taxes</td>
<td>2,687</td>
<td>3,760</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9,145</td>
<td>13,175</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td><strong>Taxes on property</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxes on movable property</td>
<td>6,744</td>
<td>9,510</td>
<td>41%</td>
<td></td>
</tr>
<tr>
<td>Taxes on financial and capital transactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial institutions transactions taxes</td>
<td>1,831</td>
<td>972</td>
<td>-47%</td>
<td>X</td>
</tr>
<tr>
<td>Government borrowing guarantee levies</td>
<td>54</td>
<td>185</td>
<td>243%</td>
<td></td>
</tr>
<tr>
<td>Stamp duties on conveyances</td>
<td>2,108</td>
<td>7,302</td>
<td>246%</td>
<td></td>
</tr>
<tr>
<td>Other stamp duties</td>
<td>1,890</td>
<td>1,213</td>
<td>-36%</td>
<td>X (part)</td>
</tr>
<tr>
<td>Total</td>
<td>12,636</td>
<td>19,182</td>
<td>52%</td>
<td></td>
</tr>
<tr>
<td><strong>Taxes on provision of goods and services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General taxes (sales tax)</td>
<td>11,624</td>
<td>791</td>
<td>-93%</td>
<td>X</td>
</tr>
<tr>
<td>Goods and services tax (GST)</td>
<td>27,389</td>
<td>-</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Excises and levies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crude oil and LPG (including PRRT)</td>
<td>9,510</td>
<td>12,742</td>
<td>34%</td>
<td>X</td>
</tr>
<tr>
<td>Beer</td>
<td>821</td>
<td>1,657</td>
<td>102%</td>
<td>X</td>
</tr>
<tr>
<td>Potable Spirits</td>
<td>188</td>
<td>382</td>
<td>103%</td>
<td>X</td>
</tr>
<tr>
<td>Tobacco</td>
<td>1,481</td>
<td>4,850</td>
<td>222%</td>
<td>X</td>
</tr>
<tr>
<td>Total</td>
<td>12,000</td>
<td>19,630</td>
<td>64%</td>
<td></td>
</tr>
<tr>
<td>Agricultural production taxes</td>
<td>692</td>
<td>553</td>
<td>-20%</td>
<td></td>
</tr>
<tr>
<td>Levies on statutory corporations</td>
<td>517</td>
<td>82</td>
<td>-84%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>13,209</td>
<td>20,265</td>
<td>53%</td>
<td></td>
</tr>
<tr>
<td><strong>Taxes on international trade</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxes on international trade</td>
<td>3,479</td>
<td>5,214</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Taxes on gambling</td>
<td>2,960</td>
<td>3,707</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Taxes on insurance</td>
<td>1,688</td>
<td>2,836</td>
<td>68%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>32,961</td>
<td>60,202</td>
<td>83%</td>
<td></td>
</tr>
<tr>
<td><strong>Taxes on the use of goods and activities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor vehicle taxes</td>
<td>3,093</td>
<td>4,291</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>Franchise taxes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas taxes</td>
<td>18</td>
<td>-</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Petroleum products taxes</td>
<td>1,427</td>
<td>-</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Tobacco taxes</td>
<td>2,067</td>
<td>-</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Liquor taxes</td>
<td>685</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4,197</td>
<td>13</td>
<td>-100%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>451</td>
<td>1,010</td>
<td>124%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7,742</td>
<td>5,314</td>
<td>-31%</td>
<td></td>
</tr>
<tr>
<td><strong>Total: All</strong></td>
<td>135,246</td>
<td>216,915</td>
<td>60%</td>
<td></td>
</tr>
</tbody>
</table>

Note: 1994-95 taxation revenue is reported on a realisation basis. 2001-02 is reported on an accruals basis. The different numbers are not directly comparable but in relation to expenditure based taxes, this difference is probably not that important. Different treatment is also evident over this period in tax expenditures of petroleum products. Adjustment is made to this data not in the above table but when undertaking the Tax incidence modelling. This explains the totals difference between the above table and Table 9.

Source:
ABS Taxation Revenue 2001-02, Cat 5506.0, Table 1;
ABS Taxation Revenue 1997-98, Cat 5506.0, Table 1
Changes were also made to the method of calculating the excise on tobacco in July 1999 – moving from a weight-based system to one where the excise was determined on a per stick basis.

Business income tax reforms emanating from the RBT had an even bumpier ride than the GST with many reform proposals not finding their way through to implementation, especially the proposed entity taxation and Tax Value Method\(^\text{283}\) (TVM) of calculating business income.

For States, tax reforms have been more limited and centre on those precipitated by the introduction of the GST such as the repeal of accommodation taxes, the Financial Institutions Duty (FID) and stamp duties on share transactions.

### Personal Income Tax

The ANTS package of reforms was introduced in July 2000. The personal income tax changes over the period of study are detailed in Table 3. More significant cuts in the rates for those on high incomes were originally proposed in ANTS for introduction on 1 July 2000 but were substantially reduced when basic food was removed from the base of the GST (partly to fund this measure).

Lump sum compensation for the inflation induced wealth effects of the introduction of the GST for those in retirement was also provided\(^\text{284}\) but these changes have not been modelled in this study.

<table>
<thead>
<tr>
<th>TABLE 3 RECENT PERSONAL INCOME TAX REFORMS AND LOW INCOME REBATE(^\text{285})</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 November 1993 - 1 July 2000</strong></td>
</tr>
<tr>
<td><strong>Personal Income Tax</strong></td>
</tr>
<tr>
<td><strong>Taxable Income Range:</strong></td>
</tr>
<tr>
<td><strong>Current Values</strong></td>
</tr>
<tr>
<td>$0-$5,400</td>
</tr>
<tr>
<td>$5,401-$20,700</td>
</tr>
<tr>
<td>$20,701-$38,000</td>
</tr>
<tr>
<td>$38,001-$50,000</td>
</tr>
<tr>
<td>$50,001 and above</td>
</tr>
<tr>
<td><strong>Low Income Rebate</strong></td>
</tr>
<tr>
<td><strong>Threshold:</strong> $20,700</td>
</tr>
<tr>
<td><strong>Rebate:</strong> $150</td>
</tr>
<tr>
<td><strong>Withdrawal Rate:</strong> 4%</td>
</tr>
</tbody>
</table>

Note: A Medicare Levy of 1.5% on incomes above a range of thresholds is also imposed

### CGT changes

Australia first included capital gains into the income tax base on 19 September 1985. However, in doing so, it opted to apply it to assets purchased after that date and then only to include as income, real (inflation adjusted) capital gains. In September 1999, this concessionary approach was replaced with a 50% concession for capital gains on

\(^{283}\) See \(<\text{www.taxboard.gov.au/content/tvm_index.asp}>\)

\(^{284}\) Those on the age pension were eligible for a means tested Aged Persons Retirement Bonus of $1,000 and retirees not in receipt of government benefits were eligible for a means tested Self-Funded Retirees Supplementary Bonus of $2,000. See ANTS(1998, p59).

\(^{285}\) An update of the personal income tax schedules imposed since this period is presented in Table 2, Warren(2005).
assets held by individuals for more than one year\textsuperscript{286} - with the debate on this reform focussing on the level of the discount\textsuperscript{287} This meant that the effective maximum rate of taxation on capital gains became 24.25\% (or 50\% of the top marginal tax rate of 48.5\%).

\textbf{Goods and Services Tax}

The economic incidence of any GST is ultimately designed to fall on domestic household consumers (and possibly overseas visitors). It is not intended to be borne either by foreign households or by domestic industry. Through its method of administration (via the invoice method\textsuperscript{288} and the destinations principle\textsuperscript{289}), the tax is ultimately borne by final domestic household consumers - those persons who actually consume the good for the last time - not intermediate consumers (such as businesses buying inputs) or final consumers who are purchasing investment goods for use in further production and for redistribution or who are non-resident consumers.

The WST which was repealed in July 2000 only taxed directly around 16\% (Warren 2004) of household final consumption expenditure, while the GST which replaced it had a much broader base\textsuperscript{290}. While the Australian GST includes most goods and services, basic food, health and education are GST-free (or zero-rated). Financial services and residential accommodation are input taxed (or exempt).

In July 2000 when the WST was repealed and the 10\% GST introduced, a number of goods subject to high WST rates and excise duties were adjusted to prevent either dramatic falls or rises in their price. This was particularly the case with petrol, tobacco, beer and wine. Under the old WST, a 37\% rate was imposed on beer and 41\% on wine.\textsuperscript{291} No adjustment would have seen the price of beer fall by 25\% and the price of wine by nearly 30\%. In response, beer excise was adjusted up and a Wine Equalisation Tax (WET) of 29\% was introduced on the wholesale value of wine sales (as noted further below in relation to excise duties).

In the case of luxury cars which were previously taxed with a 45\% WST above the luxury car threshold, adjustments were made to ensure that following the repeal of the WST and the imposition of a 10\% GST, luxury car prices did not fall. This was achieved through the introduction of a 25\% Luxury Car Tax (LCT) imposed on the

\footnotesize{\textsuperscript{286} For a summary of the changes see the Treasurer’s Press Release No 58, 21 September 1999, <www.treasurer.gov.au/tsr/content/pressreleases/1999/058.asp> \textsuperscript{287} The stimulus for the reforms came from the recommendations by the 1999 Review of Business Taxes (RBT) \textit{A Tax System Redesigned}, Chapter 18. Probably the most substantial and controversial study of CGT during the last 5 years has been that commissioned by the ASX for the Review of Business Taxes in 1999 which argued for CGT concessions. See <www.asx.com.au/shareholder/pdf/cgt.pdf> \textsuperscript{288} This is the method where invoices identify the GST on purchases so that producers know the tax on their inputs and can then claim a credit for this when working out the GST liability on outputs (or sales). This results in the producer only effectively being liable for GST on the value they added to their inputs (which arises primarily through their profits and wages and salaries). The sum of the value added by all the producers will ultimately sum to the final value of the goods being sold to final consumers. This is why what New Zealand and Canada call a GST is typically referred to as a Value Added Tax (or VAT) in most other countries. \textsuperscript{289} The destinations principle results in exports being GST free and import fully taxed. \textsuperscript{290} Note that the Australian WST also imposed significant taxes on business inputs with around half of the revenue collected coming from taxing business inputs. \textsuperscript{291} In mid 1997, the High Court declared State Franchise Taxes unconstitutional. Following negotiations with the States, the State franchise tax was integrated into the WST. As a result, the WST rate on beer was increased from 22\% to 37\% and the WST rate on wine was increased from 26\% to 41\%.}
retail value of luxury cars above a threshold (which was $57,009 in the 2002-03 financial year)\(^{292}\).

**Excise Duties and State Business Franchise Taxes**

Excise duties have been subject to a number of changes over the period of study. Other than rate increases due to indexation and one off increases, there have been four main changes:

1. State Business Franchise Taxes (BFT) were declared unconstitutional in August 1997 and those BFTs on petrol, tobacco and beer were then incorporated into excise duties (and that on wine reflected in a change in the WST on wine);
2. Excise duties changed in July 2000 to reflect the introduction of the GST and to ensure that prices did not change as a result (as noted above);
3. In November 1999, the previous system of imposing excise duty on cigarettes by weight was replaced by a per stick system which, when combined with the 10% GST, resulted in a substantial increase in the taxation of tobacco;
4. Indexation of petroleum products was repealed, effective August 2001.

**Company Taxation**

Table 4 details changes to the company tax rate over the period of study. What is not shown is that these rate changes were largely financed through an expansion of the company income tax base, such as the removal or reduction in the number of income concessions including the replacement (except for small business taxpayers) of accelerated depreciation arrangements with an effective life system\(^{293}\) (although the latter change does largely involve issues of timing).

**TABLE 4 CORPORATE TAX RATES**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Rate</td>
<td>46%</td>
<td>49%</td>
<td>39%</td>
<td>33%</td>
<td>36%</td>
<td>34%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Source: Treasury Pocket Brief to the Australian Tax System Dec 2004

**State Taxation**

State Business Franchise Taxes (BFT) were incorporated into the Commonwealth excise duties and WST in 1997 when these taxes were declared unconstitutional. States were subsequently given the revenue raised by the Commonwealth from these new Commonwealth imposts. While a flat amount per unit of the commodity was collected across each State, the Commonwealth then left the States to reimburse retailers in their State so that the effective equivalent amount of BFT imposed on consumers of these goods was the same as before their loss of BFT.

As part of the Intergovernmental Agreement 2005 signed by States prior to the introduction of the GST, States agreed to abolish their Accommodation Taxes in July 2000 and FID, along with stamp duties on share transactions, in July 2001. Other taxes such as Bank Accounts Duty and various stamp duties on business transactions that

\(^{292}\) Information on both the LCT and WET are administered by the ATO and more information on these taxes can be found at [www.ato.gov.au](http://www.ato.gov.au)

\(^{293}\) See [www.treasurer.gov.au/tsr/content/pressreleases/1999/086.asp](http://www.treasurer.gov.au/tsr/content/pressreleases/1999/086.asp)
were originally proposed for repeal were postponed for later review as a result of food being removed from the GST base\textsuperscript{294}. It was expected that if all States received above the expected level of GST revenue, that by 1 July 2005 they would favourably consider repealing these taxes.

\textbf{SOCIO-ECONOMIC AND DEMOGRAPHIC CHANGES}

Understanding and interpreting intertemporal tax incidence results requires an appreciation of not just the nature of tax changes, but how the composition and circumstances of the household groups changed over the period studied. It is quite possible that the changes in tax revenue evident in Table 2 for example, might be due as much to changes in the circumstance and preference of the taxpayers as to changes in the base and rates of the taxes (as might be the case with alcohol and tobacco).

For this and other reasons, it is important to outline socio-economic and demographic changes over the period studied and this is the objective of this section.

Table 5 shows just how marked have been the changes in the composition of the population and the workforce between 1994-95 and 2001-02. Several points are worthy of note:

1) The population has aged over the period of study, indicated by fewer persons aged less than 15 years and more aged 65 and above.

2) The falling duration of unemployment, which reflected the declining proportion of the population unemployed.

3) There has been a fall in the number of males employed but a sizeable increase in the female participation rate (which impacts directly on household incomes as a result of there being more two-earner households).

4) An increase in the number of hours worked by over 7%.

5) A declining savings ratio, reflecting increased expenditure of disposable income (which can also reflect increased household wealth).

6) The proportion of the labour force employed full-time has fallen, especially in the case of males, but this has been offset by the proportion working in part-time positions increasing quite substantially - a result which benefits females most, particularly those who are married.

These and other changes over the period of study pose important qualifications to the empirical results presented in this paper (and their study will be the focus of future research). Moreover, it is possible that the tax reforms introduced over the period of study have themselves impacted on these indicators. Acknowledging the impact these trends can have as an explanatory variable for changes in tax incidence over the period studied is important and may avoid a misleading impression being given about the source of changes in the incidence of particular taxes. After all, the changing incidence may be just as much to do with changes in the circumstances of the household as it has to do with changes in the tax system. Table 6 sets out the changes

\textsuperscript{294}The Commonwealth, in an agreement with the Australian Democrats, reduced the size of the personal income tax cuts going to high income individuals and the number of State taxes to be repealed in return for basic foods being removed from the GST base.
### TABLE 5 SELECTED INDICATORS OF THE CHANGING ECONOMIC, SOCIAL AND DEMOGRAPHIC SITUATION IN AUSTRALIA

<table>
<thead>
<tr>
<th>Percent of population:</th>
<th>1994-95</th>
<th>2001-02</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14 years</td>
<td>21.5%</td>
<td>20.4%</td>
<td>-5.1%</td>
</tr>
<tr>
<td>65 years and above</td>
<td>11.8%</td>
<td>12.6%</td>
<td>6.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mean duration of Unemployment (weeks)</th>
<th>1994-95</th>
<th>2001-02</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>57.5</td>
<td>51.9</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percent of labour force:</th>
<th>1994-95</th>
<th>2001-02</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployed</td>
<td>8.7%</td>
<td>6.8%</td>
<td></td>
</tr>
<tr>
<td>Employed - full time</td>
<td>68.9%</td>
<td>67.1%</td>
<td></td>
</tr>
<tr>
<td>Employed - part time-total</td>
<td>22.4%</td>
<td>26.2%</td>
<td></td>
</tr>
<tr>
<td>Employed - part time-female</td>
<td>16.7%</td>
<td>18.7%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Labour force participation rate of civilian population 15 years and above:</th>
<th>1994-95</th>
<th>2001-02</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>73.7%</td>
<td>72.1%</td>
<td></td>
</tr>
<tr>
<td>Female - married</td>
<td>54.1%</td>
<td>57.4%</td>
<td></td>
</tr>
<tr>
<td>Female - single</td>
<td>51.9%</td>
<td>52.0%</td>
<td></td>
</tr>
<tr>
<td>All groups</td>
<td>63.3%</td>
<td>63.4%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Taxes:</th>
<th>1994-95</th>
<th>2001-02</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current $b</td>
<td>$149.23</td>
<td>$216.95</td>
<td>45.4%</td>
</tr>
<tr>
<td>As a % of GDP</td>
<td>29.2%</td>
<td>31.0%</td>
<td></td>
</tr>
<tr>
<td>Tax per capita(CPI Adjusted)</td>
<td>$8,257</td>
<td>$9,251</td>
<td>12.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage in economic cycle indicated by the % change in real GDP in:</th>
<th>1994-95</th>
<th>2001-02</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous year</td>
<td>3.8%</td>
<td>3.0%</td>
<td></td>
</tr>
<tr>
<td>Current year</td>
<td>4.1%</td>
<td>3.0%</td>
<td></td>
</tr>
<tr>
<td>One year later</td>
<td>4.3%</td>
<td>3.5%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GDP per capita(current prices)</th>
<th>1994-95</th>
<th>2001-02</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per capita(CPI adjusted prices)</td>
<td>$25,650</td>
<td>$28,225</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Index of average hours worked (ANZSIC divisions A to K and P)</th>
<th>1994-95</th>
<th>2001-02</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index 2003 =100</td>
<td>92.8</td>
<td>99.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Household saving ratio (current prices)</th>
<th>1994-95</th>
<th>2001-02</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average housing loan size: Nominal</td>
<td>$93,830</td>
<td>$133,780</td>
<td>42.6%</td>
</tr>
<tr>
<td>Average housing loan size: CPI Adjusted</td>
<td>$93,830</td>
<td>$112,041</td>
<td>19.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Full time male adult ordinary earnings (seasonly adjusted) increase (%)</th>
<th>1994-95</th>
<th>2001-02</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>$673</td>
<td>$857</td>
<td>42.6%</td>
<td></td>
</tr>
<tr>
<td>31%</td>
<td>27%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ratio average housing loan / annual average male ordinary earnings</th>
<th>1994-95</th>
<th>2001-02</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.7</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Female - 15y and older never married (%)</th>
<th>1994-95</th>
<th>2001-02</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>21%</td>
<td>23%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial assets of the household sector</th>
<th>1994-95</th>
<th>2001-02</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>$37,904</td>
<td>$49,676</td>
<td>31.1%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial liabilities of the household sector</th>
<th>1994-95</th>
<th>2001-02</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>$14,055</td>
<td>$21,150</td>
<td>50.5%</td>
<td></td>
</tr>
</tbody>
</table>

Source: ABS 3201.0 Population by Age and Sex, Australian States and Territories Table 9. Estimated Resident Population By Single Year Of Age, Australia(a)
ABS Year Book Australia 2002 Income and Welfare Special Article - Income Support Payments in Australia
ABS 6291.0.55.001 Labour Force, Australia, Detailed - Electronic Delivery Table 15a: Unemployed persons by Duration of unemployment since last full-time job and Sex
ABS 5204.0 Australian System of National Accounts Table 1. Key National Accounts Aggregates
ABS 5609.0 Housing Finance, Australia Table 13c. Housing Finance Commitments (Owner Occupation), By Purpose and Lender: Australia, Original (Average Loan Size - $000)(c)
ABS 6302.0 Average Weekly Earnings, Australia Table 2. Average Weekly Earnings Of Employees, Australia (Dollars) - Seasonally Adjusted
ABS 3105.0.65.001 Australian Historical Population Statistics - 7.Marriages and divorces Table 105. Estimated resident population, sex and marital status, Australia, 30 June, 1976 onwards
Reserve Bank statistics B20 Financial Assets and Liabilities of The Private Non-Financial Sectors
OECD Revenue Statistics 2003
in the sources of household income over the period 1994-95 and 2001-02. The contribution to household income from compensation of employees has increased, as would be expected with increased employment.

Similarly, with falling interest rates, we would also expect a falling contribution from interest income. The big changes have been in the contribution from dividends and from government social assistance programs. The latter has occurred despite falling unemployment and appears due to increased welfare payments to families with children and to the aged, as well as to the general increase in transfer payments that occurred as compensation for the introduction of the GST for low income households.

The other important trend is that associated with household expenditure as shown in Table 7. Here there was a marked change in the consumption patterns of households over the period. Some of this has been due to the arrival of new products (computers and mobile phones) and others to improved standards of living which result in less expenditure on durables (furniture, clothing) and more on services (recreation, health and education). The expenditure on the sins of tobacco and alcohol appear to have also increased in importance - but some of this could be due to increased taxes on these commodities - while another reason might be that these are complements to increased consumption of services (such as travel and accommodation).

Some care should also be taken in making comparisons over this period using the data in Table 7 because a 10% GST was imposed on many of these goods and services when there was no such tax before. This is the case for example with communication products. Similarly, some items remained untaxed (basic foods) which could explain why they declined in importance in household budgets.

**Table 6 Household Income**

<table>
<thead>
<tr>
<th>Income source</th>
<th>1994-95</th>
<th>2001-02</th>
<th>Change over period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary income receivable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross operating surplus-dwellings owned by persons</td>
<td>37,071</td>
<td>8.9%</td>
<td>56,670</td>
</tr>
<tr>
<td>Gross mixed income</td>
<td>46,138</td>
<td>11.1%</td>
<td>64,965</td>
</tr>
<tr>
<td>Compensation of employees</td>
<td>224,612</td>
<td>53.9%</td>
<td>337,104</td>
</tr>
<tr>
<td><strong>Property income receivable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td>16,675</td>
<td>4.0%</td>
<td>16,150</td>
</tr>
<tr>
<td>Imputed interest</td>
<td>22,995</td>
<td>5.5%</td>
<td>25,587</td>
</tr>
<tr>
<td>Dividends</td>
<td>5,808</td>
<td>1.4%</td>
<td>13,314</td>
</tr>
<tr>
<td>Rent on natural assets</td>
<td>18</td>
<td>0.0%</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total property income receivable</strong></td>
<td>45,496</td>
<td>10.9%</td>
<td>55,070</td>
</tr>
<tr>
<td><strong>Total primary income receivable</strong></td>
<td>353,317</td>
<td>84.7%</td>
<td>513,809</td>
</tr>
<tr>
<td><strong>Secondary income receivable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workers’ compensation</td>
<td>4,522</td>
<td>1.1%</td>
<td>5,675</td>
</tr>
<tr>
<td>Social assistance benefits</td>
<td>40,795</td>
<td>9.8%</td>
<td>63,810</td>
</tr>
<tr>
<td>Non-life insurance claims</td>
<td>10,222</td>
<td>2.5%</td>
<td>12,321</td>
</tr>
<tr>
<td>Current transfers to non-profit institutions</td>
<td>7,217</td>
<td>1.7%</td>
<td>11,424</td>
</tr>
<tr>
<td>Other current transfers</td>
<td>892</td>
<td>0.2%</td>
<td>1,586</td>
</tr>
<tr>
<td><strong>Total secondary income receivable</strong></td>
<td>63,648</td>
<td>15.3%</td>
<td>94,816</td>
</tr>
<tr>
<td><strong>Total gross income</strong></td>
<td>416,965</td>
<td>100.0%</td>
<td>608,625</td>
</tr>
</tbody>
</table>

Source: ABS National Accounts: National Income and Expenditure, 2003-04, Cat No 5204, Table 46
### Table 7 Household Final Consumption Expenditure

<table>
<thead>
<tr>
<th></th>
<th>1994-95</th>
<th>2001-02</th>
<th>Change over Period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$m</td>
<td>$m</td>
<td>% average change</td>
</tr>
<tr>
<td>Food</td>
<td>31,805</td>
<td>44,955</td>
<td>11.3% 10.6% -9.4%</td>
</tr>
<tr>
<td>Alcoholic beverages and</td>
<td>10,694</td>
<td>18,006</td>
<td>11.3% 4.2% -17.6%</td>
</tr>
<tr>
<td>tobacco</td>
<td>3.8%</td>
<td>4.2%</td>
<td>68.4% 20.2%</td>
</tr>
<tr>
<td>Clothing and footwear</td>
<td>12,394</td>
<td>16,472</td>
<td>4.4% 3.9% 17.6%</td>
</tr>
<tr>
<td>Rent and other dwelling</td>
<td>51,819</td>
<td>77,092</td>
<td>18.4% 18.1% -2.0%</td>
</tr>
<tr>
<td>services</td>
<td>5,961</td>
<td>8,632</td>
<td>2.1% 2.0% 44.8%</td>
</tr>
<tr>
<td>Electricity, gas and</td>
<td>17,270</td>
<td>23,721</td>
<td>6.1% 5.6% -13.4%</td>
</tr>
<tr>
<td>other fuel</td>
<td>12,381</td>
<td>21,165</td>
<td>4.4% 5.0% 37.4%</td>
</tr>
<tr>
<td>Furnishings and household</td>
<td>35,538</td>
<td>49,317</td>
<td>12.6% 11.6% -12.0%</td>
</tr>
<tr>
<td>equipment</td>
<td>33,695</td>
<td>52,134</td>
<td>12.0% 12.3% -12.0%</td>
</tr>
<tr>
<td>Health</td>
<td>5,623</td>
<td>11,559</td>
<td>2.0% 2.7% 105.6%</td>
</tr>
<tr>
<td>Communication</td>
<td>33,695</td>
<td>52,134</td>
<td>12.0% 12.3% -12.0%</td>
</tr>
<tr>
<td>Recreation and culture</td>
<td>5,678</td>
<td>10,068</td>
<td>2.0% 2.4% 77.3%</td>
</tr>
<tr>
<td>Education services</td>
<td>20,855</td>
<td>32,241</td>
<td>7.4% 7.6% 54.6%</td>
</tr>
<tr>
<td>Hotels, cafes and</td>
<td>38,085</td>
<td>59,467</td>
<td>13.5% 14.0% 56.1%</td>
</tr>
<tr>
<td>restaurants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous goods and</td>
<td>281,798</td>
<td>424,829</td>
<td>100.0% 100.0% 50.8%</td>
</tr>
<tr>
<td>services</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: ABS National Accounts: National Income and Expenditure, 2003-04, Cat No 5204, Table 52

### Overview of Methodology

It is important to appreciate that while a very wide range of Australian taxes are included within the scope of this study, this study still only examines part of the impact of government on household income distribution. The impact of Capital Gains Tax is not included, as well as non-cash benefits, tax expenditures or those costs associated with imposing and collecting taxes. Furthermore, the results presented are heavily dependent upon the quality of the household sample survey data used and our assumptions about the shifting of taxes.

Household income is increased directly by benefits in the form of regular cash payments, such as the age pension and family payments, and indirectly by government expenditures such as those on health and education. On the other hand, household income is reduced by personal income taxes (direct taxes) and by indirect taxes passed on in the higher prices households pay for goods and services (ABS, 2001a, p.3). However, unlike the ABS fiscal incidence studies, all taxes are considered (with the exception of the Fringe Benefits Tax and the income tax on capital gains) and when a tax is included, all tax revenue collected is allocated either to domestic or to foreign households. In contrast, in the case of indirect taxes, the ABS fiscal incidence studies overlooks taxes which impact directly or indirectly on all final demand expenditures other than household private final consumption expenditure.

In summary, this paper estimates the distribution in 1994-95 and 2001-02 of:

- The major social security cash transfers and family payments;
- Income tax and selected income tax rebates and concessions; and
- A very wide range of Commonwealth, State and local taxes.

The methodology used in this study is described in more detail in Appendix A of this paper.
Data source
The core data sources used in the simulation of the 1994-95 world is the 1993-94 Household Expenditure Survey (HES) confidentialised unit record file released by the Australian Bureau of Statistics and for the 2001-02 world, the 1998-99 HES confidentialised unit record file. Ideally, access to post-ANTS HES survey data would have been preferable, providing a more current insight into income and expenditure by Australian households in the post-ANTS tax environment. However, 1998-99 HES data are the latest data available.

These HES confidentialised unit record files contain a snapshot of the demographic, labour force, income and other characteristics of the Australian population in 1993-94 and 1998-99. It is important to note that the scope of the survey is restricted to those living in private dwellings and excludes those living in remote and sparsely settled areas. We made some adjustments to this file to update the private incomes and housing costs of households to estimated 1994-95 and 2001-02 levels, using such inflators as average weekly earnings and housing consumer price indexes. We also adjusted the population weights from 1993-94 to 1994-95, and from 1998-99 to 2001-02 levels, to allow for the aggregate growth in the population that occurs each year. We did not reweight the entire 1993-94 and 1998-99 surveys to account for possible changes in, for example, labour force and demographic status.

Taxes and cash transfers
In July 2000 Australia introduced a complex tax-mix shift towards indirect taxes, accompanied by extensive social security reforms. As a result, the declared values of these items in the 1998-99 Household Expenditure Survey were redundant. Accordingly, we had to impute the rules of the income tax and social security systems to estimate the income taxes paid by and the transfers received by each of the households in the HES file. This aspect of the modelling employed NATSEM’s STINMOD model, which is a long-established static microsimulation model of the Australian tax and transfer system used by government departments for budget policy formulation.

To simulate the impact of the GST and excises we calculated the average tax rates applying to each of the 500 plus detailed expenditure categories contained within the HES for each household. Taxes initially borne by government or business are assumed to be shifted ultimately to consumers, either residents or non-residents. (This differs from the ABS fiscal incidence studies, which only allocate to households those indirect taxes that can be directly assigned to households through their final consumption expenditure. However, like the ABS, we do not match national accounts estimates of tax collected exactly, because of scope exclusions in the HES and under-statement of tobacco and alcohol consumption by households within the HES.)

Income concepts used
A number of income concepts are used in fiscal incidence studies, and these are summarised in Box 1. Original or private income is the narrowest definition of income used in the study, and comprises income from such sources as wages, superannuation, investments and own business. Adding direct government cash benefits to private income gives gross income, which is the income concept used in many ABS studies (e.g. ABS, 2001a). Disposable income is derived by subtracting direct (or personal income) taxes from gross income. Disposable income, after adjustment for family or household size through use of an equivalence scale, is the income concept used in the majority of recent Australian studies of income distribution and financial disadvantage.
(Harding, Lloyd and Greenwell, 2001, and Saunders, 2001). The ABS has also used this income concept for ranking Australians in its latest Income Distribution Survey (ABS 2003).

While the payment of income tax is taken account of during the calculation of disposable income, no account is taken of the payment of other taxes or of the services that governments provide that bestow a personal benefit upon households – generally a service that they would otherwise have to buy themselves. Disposable income may thus provide an incomplete picture of the relative living standards of different types of families (Harding, 1995, p. 71). Despite providing only a partial picture, disposable income is widely used in Australian income distribution studies because the requisite data are readily available in the ABS national income surveys.

Broader income measures are used in this study. From gross income, the personal income tax is subtracted to yield disposable income from which all indirect taxes are then subtracted to obtain post-tax income. In fiscal incidence studies, as distinct from this tax incidence study, one would then add in the value of indirect government benefits – that is, the estimated value of health, education, welfare and housing services provided by government. The resulting income measure is termed final income and, in essence, this is the most comprehensive measure of the relative economic well-being of households.

Table 2 details the Commonwealth, State and local government taxation revenue collected in 1994-95 and 2001-02, all of which are allocated to households using the shifting assumptions in Appendix B.
Equivalent incomes
When attempting to compare the economic well-being of households of differing size and composition, it is important to use equivalence scales. For example, it would be expected that a household comprising four people would need more income than a single person household if the two households were to enjoy the same standard of living.

There is not, however, agreement internationally or nationally about exactly how much more income the four person household requires than the single person household to achieve the same standard of living. Like the recent ABS income distribution study (2003), our study uses the modified OECD equivalence scale. In our study, this means that we have given the first adult in each household a weight of 1.0, second and subsequent adults a weight of 0.5 points, and dependent children a weight of 0.3 points. The relevant cash income measure is then divided by the sum of the above points, to calculate the household’s equivalent income. The equivalence scale applied to cash income measures are intended to capture the economies of scale that occur when individuals share households (e.g. a couple living together require only one bed and fridge rather than the two required if they lived separately).

Weighting
Another difficult issue is the appropriate ‘weight’ to use when analysing the results of our study. Consider two households, one containing four people and the other containing one person. If we use household weighting, then each household counts once when constructing our inequality measures and income estimates. If we use person weighting, then the first household counts four times and the second household counts once. The second approach is considered theoretically the most appropriate, as it does not assume that people living in larger households are less important than people living in smaller households when assessing the income distribution. The ABS has just moved in its most recent income distribution publication to presenting some results for persons rather than for households (ABS 2003, p. 13).

In the output tables in the following section, when dividing the population into income decile, we have used deciles of persons rather than deciles of households. Thus, the bottom decile consists of the bottom 10 per cent of Australians, rather than the bottom 10 per cent of households. Using person weighting to create the deciles ensures that our measures are not biased by systematic differences in the average household size within different deciles. As the ABS notes, this was a problem with their earlier fiscal incidence studies, in which they used deciles of households rather than deciles of persons (ABS 2001, p. 9).

Quite apart from the division of the population into income deciles, another issue is whether the results included within each output table are person or household weighted. While person weighting might be considered the most desirable alternative theoretically, for most readers the results are then more difficult to interpret and explain. Accordingly, we have followed the practice used in the most recent fiscal incidence studies carried out by the ABS and UK Office for National Statistics, in presenting averages for households within each output table (ABS, 2001a, ONS, 2003) but where deciles represent persons deciles. Likewise, when estimating the Lorenz and Concentration Curves (in Section 7), person weights are used.
INCOME DECILES

For this part of our study all Australians have been ranked by the equivalent gross income of their household, and then divided into population deciles. All of the results within the cells of the tables and figures are for households, rather than for persons. That is, the average household private income in 2001-02 of the top 10 per cent of Australians is $2,591 a week. In other words, we have only used persons when ranking Australians into each of the income deciles, and have weighted by households when filling in the cells within the tables and figures. Sensitivity analysis suggested that this made very little difference to the results.

Table 8 details the broad changes in the distribution of private (or market) incomes and gross income. What is apparent is the increasing share of private income going to those in the highest decile. Equally interesting is the improving position those in the lower deciles. Further analysis suggested that this was partly due to the falling unemployment noted in Table 5, but was also a result of compositional change, with older Australians tending to move out of the bottom two deciles to be replaced by single people of working age. What is particularly interesting is that the trend apparent in private income is not so significant with gross income. This may be the result of government transfers being relinquished as private incomes increase, which acts to offset the impact of the improving private incomes, combined with the lower allowances paid to single unemployed people relative to the pensions paid to older Australians (with the former tending to replace some of the latter in the bottom decile).

Table 8 also highlights the percentage change in private and gross incomes of each decile over the period of study. Looking at changes in nominal gross incomes over the period, those on the bottom and top of the income distribution have shown somewhat stronger gains in income, with the income increases for middle-income Australian households being more modest. However, it is also notable that there have been strong gains in income right across the income spectrum over the seven years.

## Table 8 Estimated Changes in the Distribution of Gross and Private Income: 1994-95 and 2001-02

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$pw</td>
<td>Share</td>
<td>$pw</td>
<td>Share</td>
<td>$pw</td>
<td>Share</td>
</tr>
<tr>
<td>1</td>
<td>155</td>
<td>2.7%</td>
<td>-13</td>
<td>-0.3%</td>
<td>211</td>
<td>2.8%</td>
</tr>
<tr>
<td>2</td>
<td>282</td>
<td>4.2%</td>
<td>36</td>
<td>0.6%</td>
<td>390</td>
<td>4.2%</td>
</tr>
<tr>
<td>3</td>
<td>378</td>
<td>4.9%</td>
<td>150</td>
<td>2.3%</td>
<td>512</td>
<td>4.9%</td>
</tr>
<tr>
<td>4</td>
<td>519</td>
<td>5.6%</td>
<td>392</td>
<td>4.9%</td>
<td>697</td>
<td>5.7%</td>
</tr>
<tr>
<td>5</td>
<td>622</td>
<td>7.0%</td>
<td>546</td>
<td>7.2%</td>
<td>847</td>
<td>6.9%</td>
</tr>
<tr>
<td>6</td>
<td>737</td>
<td>8.7%</td>
<td>666</td>
<td>9.1%</td>
<td>984</td>
<td>8.5%</td>
</tr>
<tr>
<td>7</td>
<td>878</td>
<td>10.3%</td>
<td>833</td>
<td>11.3%</td>
<td>1,176</td>
<td>10.1%</td>
</tr>
<tr>
<td>8</td>
<td>1,023</td>
<td>12.8%</td>
<td>999</td>
<td>14.5%</td>
<td>1,376</td>
<td>12.4%</td>
</tr>
<tr>
<td>9</td>
<td>1,237</td>
<td>16.6%</td>
<td>1,212</td>
<td>19.0%</td>
<td>1,618</td>
<td>16.2%</td>
</tr>
<tr>
<td>10</td>
<td>1,846</td>
<td>27.2%</td>
<td>1,838</td>
<td>31.4%</td>
<td>2,598</td>
<td>28.2%</td>
</tr>
<tr>
<td>All</td>
<td>758</td>
<td>100.0%</td>
<td>653</td>
<td>100.0%</td>
<td>1,029</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Note: The income amounts in this table have not been adjusted for inflation, so the percentage changes are in nominal rather than real incomes. Deciles shown are deciles of persons ranked by the equivalent gross income of their household. The results shown in the table cells are household weighted and therefore show the results of households in these person deciles.
TAX INCIDENCE: 1994-95 AND 2001-02

The taxes imposed in Australia can be borne by both residents and non-residents depending on how the taxes are shifted. The shifting assumptions adopted in this study are detailed in Appendix B.

The resulting distribution of Australian taxes between residents and non-residents in the two periods of study is shown in Table 9. These incidence estimates are far from uncontroversial. There is a substantial debate that taxes which ultimately impact on exports such as the Payroll Tax or the petroleum excise, will in the case of a small open economy, impact not directly on non-residents but cause a devaluation in the Australian currency (the so-called purchasing power parity theory). This would force the tax back onto Australians through higher priced imports in general.

Similar debates exist about the incidence of company taxes imposed on non-resident investors. However, to the extent that comparable company income taxes are imposed in other jurisdictions, it is probably less controversial to assume that company income taxes are borne in part by non-residents than it is to assume taxes on inputs into exports are borne by non-residents.

### Table 9 Changing Tax Burden on Australian Residents and Non-Residents: 1994-94, 2001-02

<table>
<thead>
<tr>
<th></th>
<th>1994-95</th>
<th></th>
<th>2001-02</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Resident's Tax Burden ($m)</td>
<td>Non-Resident's Tax Burden ($m)</td>
<td>% on Non-Residents</td>
<td>Resident's Tax Burden ($m)</td>
</tr>
<tr>
<td>FEDERAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company Income Tax</td>
<td>12,785</td>
<td>3,689</td>
<td>22.4%</td>
<td>23,027</td>
</tr>
<tr>
<td>GST</td>
<td></td>
<td></td>
<td></td>
<td>26,763</td>
</tr>
<tr>
<td>Wholesale Sales Tax</td>
<td>10,800</td>
<td>824</td>
<td>7.1%</td>
<td>0</td>
</tr>
<tr>
<td>Excise - Liquor</td>
<td>492</td>
<td>53</td>
<td>9.7%</td>
<td>801</td>
</tr>
<tr>
<td>- Petrol</td>
<td>8,770</td>
<td>1,586</td>
<td>15.3%</td>
<td>11,958</td>
</tr>
<tr>
<td>- Tobacco</td>
<td>1,487</td>
<td>95</td>
<td>6.0%</td>
<td>4,606</td>
</tr>
<tr>
<td>- Beer</td>
<td>861</td>
<td>0</td>
<td>0.0%</td>
<td>1,677</td>
</tr>
<tr>
<td>Primary Production</td>
<td>466</td>
<td>213</td>
<td>31.4%</td>
<td>372</td>
</tr>
<tr>
<td>Customs Duty</td>
<td>2,776</td>
<td>143</td>
<td>4.9%</td>
<td>4,104</td>
</tr>
<tr>
<td>Personal Income Tax</td>
<td>54,635</td>
<td>777</td>
<td>1.4%</td>
<td>86,112</td>
</tr>
<tr>
<td>Fringe Benefits Tax</td>
<td>2,530</td>
<td>191</td>
<td>7.0%</td>
<td>3,391</td>
</tr>
<tr>
<td>Other Indirect Taxes</td>
<td>440</td>
<td>56</td>
<td>11.2%</td>
<td>592</td>
</tr>
<tr>
<td><em>Sub Total</em></td>
<td>96,044</td>
<td>7,627</td>
<td>7.4%</td>
<td>163,403</td>
</tr>
<tr>
<td>STATE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Tax</td>
<td>1,778</td>
<td>113</td>
<td>6.0%</td>
<td>2,554</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>2,991</td>
<td>80</td>
<td>2.6%</td>
<td>4,135</td>
</tr>
<tr>
<td>Stamp Duties</td>
<td>4,917</td>
<td>270</td>
<td>5.2%</td>
<td>9,883</td>
</tr>
<tr>
<td>Payroll Tax</td>
<td>5,719</td>
<td>954</td>
<td>14.3%</td>
<td>8,151</td>
</tr>
<tr>
<td>Gambling Taxes</td>
<td>2,957</td>
<td>0</td>
<td>0.0%</td>
<td>3,704</td>
</tr>
<tr>
<td>Franchise Taxes</td>
<td>3,908</td>
<td>289</td>
<td>6.9%</td>
<td>13</td>
</tr>
<tr>
<td>Other Indirect Taxes</td>
<td>2,677</td>
<td>163</td>
<td>5.7%</td>
<td>2,457</td>
</tr>
<tr>
<td><em>Sub Total</em></td>
<td>24,946</td>
<td>1,870</td>
<td>7.0%</td>
<td>30,896</td>
</tr>
<tr>
<td>LOCAL - Rates</td>
<td>4,549</td>
<td>399</td>
<td>6.4%</td>
<td>6,588</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td>125,539</td>
<td>9,806</td>
<td>7.2%</td>
<td>200,887</td>
</tr>
</tbody>
</table>

Note: Differences from ABS Data for 1994-95 is due to treatment of excise rebates and other changes to ensure data series are consistent.

Table 10 outlines the changing incidence of Australian taxes over the period 1994-95 to 2001-02, showing each of the major tax groups as a percentage of gross income. By 2001-02, middle to higher income households were paying a slightly higher proportion of their gross income in personal income taxes. The effect of bracket creep was most pronounced for the top decile, who paid an estimated 29.3 per cent of their gross income in income tax in 2001-02, up from 28.1 per cent in 1994-95.
However, the impact of the GST and the taxes that it replaced have had a greater impact upon lower income households, with these reformed indirect taxes absorbing 24.9 per cent of the gross income of the bottom decile in 2001-02, up from 23.4 per cent in 1994-95. This is because those at lower income levels are typically shown to be spending much more than their income in the ABS Household Expenditure Surveys. The increasing reliance on reformed indirect taxes (as defined in Table 2) meant that for all deciles, these taxes took a larger slice of their gross income in 2001-02 than in 1994-95, with the exception of the top decile, which recorded a slight fall.

In the case of taxes other than the reformed indirect taxes and personal income taxes, it would appear that they impact quite heavily on low income groups although the trend over the period has been for the burden on the lowest and highest groups to fall and for that on the middle income groups to increase. The increasing contribution to total tax revenue by the company tax has undoubtedly contributed to this trend. This is because over the period of study, share ownership in Australia has significantly increased amongst middle income Australians with the result that the burden of this tax is being borne by these new shareholders. The exact nature of the contribution by each different tax category will be the focus of future research.

The ‘All taxes’ column to the right of Table 10 suggests that the taxes considered in this study made up a slightly higher percentage of gross household income in 2001-02 than in 1994-95 – up by 1.5 percentage points to 45.3 per cent by 2001-02. As shown clearly in Figure 1, the results indicate that average tax rates increased slightly more for those in the upper half of the income distribution, again with the exception of the top decile, which showed a slight fall in its average tax rate.

**TABLE 10 ESTIMATED AUSTRALIAN TAXES PAID AS A PERCENTAGE OF GROSS INCOME BY DOMESTIC HOUSEHOLDS, BY DECILE OF EQUIVALENT GROSS INCOME:1994-95 AND 2001-02**

<table>
<thead>
<tr>
<th>Decile of equivalent gross income</th>
<th>Personal Income Tax</th>
<th>Reformed Indirect Taxes</th>
<th>Other Taxes</th>
<th>All Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.8%</td>
<td>23.4%</td>
<td>33.2%</td>
<td>57.5%</td>
</tr>
<tr>
<td>2</td>
<td>0.6%</td>
<td>13.8%</td>
<td>17.9%</td>
<td>32.4%</td>
</tr>
<tr>
<td>3</td>
<td>3.0%</td>
<td>13.2%</td>
<td>19.6%</td>
<td>35.8%</td>
</tr>
<tr>
<td>4</td>
<td>9.8%</td>
<td>12.0%</td>
<td>19.7%</td>
<td>41.5%</td>
</tr>
<tr>
<td>5</td>
<td>13.6%</td>
<td>11.2%</td>
<td>17.7%</td>
<td>42.5%</td>
</tr>
<tr>
<td>6</td>
<td>15.7%</td>
<td>10.3%</td>
<td>16.8%</td>
<td>42.8%</td>
</tr>
<tr>
<td>7</td>
<td>18.1%</td>
<td>9.2%</td>
<td>14.9%</td>
<td>42.3%</td>
</tr>
<tr>
<td>8</td>
<td>19.3%</td>
<td>8.4%</td>
<td>13.7%</td>
<td>41.5%</td>
</tr>
<tr>
<td>9</td>
<td>21.8%</td>
<td>7.5%</td>
<td>11.4%</td>
<td>40.7%</td>
</tr>
<tr>
<td>10</td>
<td>28.1%</td>
<td>6.7%</td>
<td>15.7%</td>
<td>50.5%</td>
</tr>
<tr>
<td>All</td>
<td>18.6%</td>
<td>9.3%</td>
<td>15.9%</td>
<td>43.8%</td>
</tr>
</tbody>
</table>

Table 11 shows the estimated average amount of various taxes paid by households within each decile and also the share of taxes paid by each decile. The share of income tax collected from the bottom half of the income distribution appears to have remained relatively stable. For the top half of the income distribution, the most marked change appears to have been an increase in the share of total income taxes paid by the top decile, reflecting their increasing share of gross income (as shown in Table 8).
The impact of the substantial reforms to the method of imposing and collecting indirect taxes has seen the incidence of this tax fall slightly more on those in the lower deciles, with it impacting less on those at the top of the income distribution. This is in large part due to the broadening of the base of the GST which has meant a slight redistribution of the burden of broad-based goods and services taxes more towards those on middle and lower incomes. Overall, however, the distribution of the tax burden appears to have remained remarkably stable over the seven years as shown by the marginal differences in the final two right hand column in the share of all taxes paid by each decile in 1994-95 and 2001-02.

**TABLE 11 ESTIMATED AMOUNT AND SHARE OF AUSTRALIAN TAXES PAID BY DOMESTIC HOUSEHOLDS, BY DECILE OF EQUIVALENT GROSS INCOME: 1994-95 AND 2001-02**

<table>
<thead>
<tr>
<th>Decile of equivalent gross income</th>
<th>Personal Income Tax</th>
<th>Reformed Indirect Taxes</th>
<th>Other Taxes</th>
<th>All Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ per week</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 $1.30</td>
<td>$1.60</td>
<td>$36.20</td>
<td>$52.70</td>
<td>$51.40</td>
</tr>
<tr>
<td>2 $1.80</td>
<td>$3.40</td>
<td>$38.90</td>
<td>$55.70</td>
<td>$50.60</td>
</tr>
<tr>
<td>3 $11.40</td>
<td>$19.90</td>
<td>$49.90</td>
<td>$70.20</td>
<td>$74.00</td>
</tr>
<tr>
<td>4 $50.70</td>
<td>$69.30</td>
<td>$62.30</td>
<td>$88.70</td>
<td>$102.10</td>
</tr>
<tr>
<td>5 $84.70</td>
<td>$119.20</td>
<td>$69.40</td>
<td>$100.10</td>
<td>$109.90</td>
</tr>
<tr>
<td>6 $115.90</td>
<td>$159.20</td>
<td>$75.50</td>
<td>$107.60</td>
<td>$123.50</td>
</tr>
<tr>
<td>7 $159.10</td>
<td>$219.00</td>
<td>$80.90</td>
<td>$119.60</td>
<td>$131.10</td>
</tr>
<tr>
<td>8 $197.70</td>
<td>$283.10</td>
<td>$86.40</td>
<td>$119.90</td>
<td>$140.30</td>
</tr>
<tr>
<td>9 $267.50</td>
<td>$365.20</td>
<td>$92.30</td>
<td>$134.90</td>
<td>$139.70</td>
</tr>
<tr>
<td>10 $517.70</td>
<td>$760.20</td>
<td>$124.20</td>
<td>$166.20</td>
<td>$289.40</td>
</tr>
<tr>
<td>All</td>
<td>$141.30</td>
<td>$200.70</td>
<td>$70.70</td>
<td>$100.00</td>
</tr>
<tr>
<td>Share by Decile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 0.1%</td>
<td>0.1%</td>
<td>6.9%</td>
<td>7.2%</td>
<td>5.7%</td>
</tr>
<tr>
<td>2 0.1%</td>
<td>0.2%</td>
<td>6.2%</td>
<td>6.1%</td>
<td>4.7%</td>
</tr>
<tr>
<td>3 0.8%</td>
<td>1.0%</td>
<td>7.0%</td>
<td>7.0%</td>
<td>6.1%</td>
</tr>
<tr>
<td>4 2.9%</td>
<td>2.9%</td>
<td>7.2%</td>
<td>7.5%</td>
<td>6.9%</td>
</tr>
<tr>
<td>5 5.1%</td>
<td>5.0%</td>
<td>8.4%</td>
<td>8.4%</td>
<td>7.9%</td>
</tr>
<tr>
<td>6 7.3%</td>
<td>7.0%</td>
<td>9.6%</td>
<td>9.6%</td>
<td>9.2%</td>
</tr>
<tr>
<td>7 10.0%</td>
<td>9.7%</td>
<td>10.2%</td>
<td>10.6%</td>
<td>9.7%</td>
</tr>
<tr>
<td>8 13.3%</td>
<td>13.1%</td>
<td>11.6%</td>
<td>11.2%</td>
<td>11.1%</td>
</tr>
<tr>
<td>9 19.4%</td>
<td>18.7%</td>
<td>13.4%</td>
<td>13.9%</td>
<td>11.9%</td>
</tr>
<tr>
<td>10 40.9%</td>
<td>42.3%</td>
<td>19.6%</td>
<td>18.6%</td>
<td>26.9%</td>
</tr>
<tr>
<td>All</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Interpreting the above tables warrant two important qualifications. Firstly, the July 2000 ANTS package of reforms involved not only tax changes but also social welfare changes designed to offset the adverse impact of these taxes. It is not surprising therefore that the indirect tax reforms demonstrate an adverse impact on those with modest incomes. What we also need to examine is the impact these reforms have on pre and post tax income distribution - an issue we examine in the following section.

The other important qualification is that the composition of deciles is not stable over time. Table 12 provides some insight into this issue and indicates that over the period of our study this was an issue. Not only did the number of adult equivalents within each household decline (reflecting the trend towards smaller households), but the changing composition of some deciles (such as the 4th and 9th) was more marked.
Table 12: Average Equivalent Adults per Household

<table>
<thead>
<tr>
<th>Decile of equivalent gross income</th>
<th>1994-95</th>
<th>2001-02</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.39</td>
<td>1.38</td>
<td>-0.9%</td>
</tr>
<tr>
<td>2</td>
<td>1.55</td>
<td>1.57</td>
<td>1.3%</td>
</tr>
<tr>
<td>3</td>
<td>1.69</td>
<td>1.67</td>
<td>-0.7%</td>
</tr>
<tr>
<td>4</td>
<td>1.90</td>
<td>1.86</td>
<td>-1.9%</td>
</tr>
<tr>
<td>5</td>
<td>1.87</td>
<td>1.89</td>
<td>0.9%</td>
</tr>
<tr>
<td>6</td>
<td>1.83</td>
<td>1.83</td>
<td>-0.3%</td>
</tr>
<tr>
<td>7</td>
<td>1.84</td>
<td>1.84</td>
<td>-0.1%</td>
</tr>
<tr>
<td>8</td>
<td>1.80</td>
<td>1.80</td>
<td>0.0%</td>
</tr>
<tr>
<td>9</td>
<td>1.73</td>
<td>1.70</td>
<td>-1.7%</td>
</tr>
<tr>
<td>10</td>
<td>1.63</td>
<td>1.62</td>
<td>-1.1%</td>
</tr>
<tr>
<td>All</td>
<td>1.70</td>
<td>1.69</td>
<td>-0.5%</td>
</tr>
</tbody>
</table>

Note: Equivalence scale assumed is a weight of 1 for the first adult, 0.5 for subsequent adults and 0.3 for each child.

Figure 1 presents a diagrammatic representation of the results in Table 10, illustrating the trend change more simply. While the burden of taxes appears to have increased most for those households in the 6th to the 9th decile, the results indicate a decline for those in the 4th decile due to a fall in the impact of “Other taxes” on this group. What is interesting is that despite all the reforms of the past decade, the tax burden on the lowest four deciles appears little changed.

Figure 1: Estimated Australian Taxes Paid as a Percentage of Gross Income by Domestic Households, by Decile of Equivalent Gross Income: 1994-95 and 2001-02
PROGRESSIVITY AND INCOME REDISTRIBUTIVE EFFECT OF TAXATION

Another informative approach to understanding what has happened to the post-tax distribution of income over our period of study is to examine changes in vertical equity in the tax system using single number indicators rather than a tabular approach. The most commonly used approaches here are through the use of concentration indexes (such as when estimating the Gini Indices), the Theil Index and the Atkinson Inequality Index\textsuperscript{295}. Warren (1989) and Smith (2001) discuss the estimation and use of various of these measures including the:

- impact of tax changes on Gini index based income inequality measures (as when estimating concentration indexes of pre and post tax income); and
- tax progressivity measures based on concentration curves.

This study will however, focus on the use of Gini indices while, at the same time, acknowledging that such measures do have their limitations. In particular, this measure assumes a particular weighting of groups across the income distribution which is not uncontroversial. Moreover, Lorenz curve based measures such as the Gini index cannot give an unambiguous indication of a trend change when the Lorenz curves cross.

The approach taken in this study will also focus only on the redistribution between households, not within them.

Change in Income Inequality due to Taxation

The Gini index of income inequality is measured as twice the area of A in Figure 2. If we have perfect equality (a concentration curve which is the diagonal line XRS in Figure 2), then the area A would be zero and the Gini index zero. The greater the area of A, the greater the inequality. A concentration curve which maps out perfect inequality (XYS) would have a Gini index (or concentration index) of unity. Between the two extremes is the normal case (XZS) where the Gini index (or concentration index) of income inequality is greater than zero but less than unity.

\textbf{FIGURE 2 CONCENTRATION CURVES}

If the Gini index of pre-tax income is \( G \) and the index of post-tax income is \( G^* \), we have an indicator of the impact the tax has on income distribution. If \( G^*-G \) is negative then income inequality is being reduced by the tax - this is defined as an income inequality improving tax. A situation where \( G^*-G \) is positive is one which worsens income inequality. Results for 1994-95 and 2001-02 are shown in Table 13 for households ranked by equivalent gross income\textsuperscript{296}.

**Table 13 Tax Progressivity and Income Redistributive Effect of Australian Taxes on the Domestic Household Sector**

<table>
<thead>
<tr>
<th></th>
<th>Personal Income Tax (PIT)</th>
<th>Reformed Indirect Taxes</th>
<th>Other Taxes</th>
<th>All Taxes excl PIT</th>
<th>All Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ATR</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994-5</td>
<td>18.8</td>
<td>9.3</td>
<td>15.6</td>
<td>24.9</td>
<td>43.6</td>
</tr>
<tr>
<td>2001-2</td>
<td>19.5</td>
<td>9.7</td>
<td>15.9</td>
<td>25.6</td>
<td>45.1</td>
</tr>
<tr>
<td><strong>Change</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.77</td>
<td>0.41</td>
<td>0.32</td>
<td>0.73</td>
<td>1.49</td>
</tr>
<tr>
<td><strong>G</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994-5</td>
<td>0.3027</td>
<td>0.3710</td>
<td>0.3682</td>
<td>0.3901</td>
<td>0.3276</td>
</tr>
<tr>
<td>2001-2</td>
<td>0.3029</td>
<td>0.3763</td>
<td>0.3702</td>
<td>0.3945</td>
<td>0.3274</td>
</tr>
<tr>
<td><strong>Change</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0002</td>
<td>0.0053</td>
<td>0.002</td>
<td>0.0044</td>
<td>-0.0002</td>
</tr>
<tr>
<td><em><em>G</em>-G</em>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994-5</td>
<td>-0.0516</td>
<td>0.0167</td>
<td>0.0139</td>
<td>0.0358</td>
<td>-0.0267</td>
</tr>
<tr>
<td>2001-2</td>
<td>-0.0547</td>
<td>0.0187</td>
<td>0.0126</td>
<td>0.0369</td>
<td>-0.0302</td>
</tr>
<tr>
<td><strong>Change</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.0031</td>
<td>0.002</td>
<td>-0.0013</td>
<td>0.0011</td>
<td>-0.0035</td>
</tr>
<tr>
<td><strong>%G</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994-5</td>
<td>-21.0</td>
<td>7.6</td>
<td>5.9</td>
<td>13.4</td>
<td>-7.5</td>
</tr>
<tr>
<td>2001-2</td>
<td>-22.5</td>
<td>8.6</td>
<td>5.4</td>
<td>14.0</td>
<td>-8.5</td>
</tr>
<tr>
<td><strong>Change</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-1.46</td>
<td>1.01</td>
<td>-0.48</td>
<td>0.54</td>
<td>-0.92</td>
</tr>
<tr>
<td><strong>%P</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994-5</td>
<td>0.2234</td>
<td>-0.1628</td>
<td>-0.0754</td>
<td>-0.108</td>
<td>0.0345</td>
</tr>
<tr>
<td>2001-2</td>
<td>0.2256</td>
<td>-0.1737</td>
<td>-0.0667</td>
<td>-0.1072</td>
<td>0.0368</td>
</tr>
<tr>
<td><strong>Change</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0022</td>
<td>-0.0109</td>
<td>0.0087</td>
<td>0.0008</td>
<td>0.0023</td>
</tr>
<tr>
<td><strong>Notes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>G</strong></td>
<td>Gini index of post (selected) tax Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>G</strong></td>
<td>Gini index of Gross Income (pre-tax)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>G 1994-95</strong></td>
<td>0.3543</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>G 2001-02</strong></td>
<td>0.3576</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em><em>G</em>-G</em>*</td>
<td>Gini Index of post-tax income less Gini Index of pre-tax income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>%G</strong></td>
<td>Contribution to % change in post-tax Gini index</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>%P</strong></td>
<td>Progressivity index (Concentration index of taxes)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Over the period of study, the distribution of gross income apparently worsened as measured by the Gini Index of gross income (G) (but, as noted below, as the Lorenz curves cross this effect is not robust (Atkinson, 1970). However, the impact of the changes to taxation had the effect of offsetting this change, resulting in the post-tax distribution of income being almost exactly the same in both years, as measured by the Gini index.

\textsuperscript{296} The equivalence scale adopted when estimating the values in Table 13 involves giving a weight on 1.0 to the first adult, 0.5 to the second and subsequent adults, and 0.3 to each child.
This lack of any significant aggregate change in overall post-tax income inequality (as shown by $G^* - G$ in Table 13) masks a change in the impact of different taxes on income distribution. The reformed indirect taxes acted to worsen income distribution but this effect was overwhelmed by an improvement in the impact of the personal income tax and a fall in the adverse impact of “other taxes” on income inequality. The primary contributor to this change was unquestionably the personal income tax.

Put more starkly, the impact of the progressive personal income tax and ‘other’ taxes has acted to offset the worsening distribution of the now much more important new reformed indirect taxes. This is despite the personal income tax cuts in July 2000. It probably has most to do with rising incomes and a failure to index the personal income tax schedule for the effects of inflation (the so-called bracket creep issue which is evident in Table 3 and discussed in detail in Warren (2004, Figure 8.2)). As shown in Table 11, the proportion of the personal income tax coming from the top decile of the population rose over the period from 40.9% to 42.3% in 2001–02.

**Tax Progressivity Measures**

Even if over time a tax improves the post-tax distribution of income, this does not mean that the progressivity of the tax has increased. It is to the changing progressivity of Australian taxes that we turn to in this section.

If tax progressivity is defined as where the ratio of the marginal tax rate (MTR) to the average tax rate (ATR) is greater than unity\(^{297}\), then a single number indicator of tax progressivity $P$ can be defined as the difference between the concentration index of taxes and the concentration index of pre-tax income. That is, twice the area between the concentration curve of taxes and the concentration curve of income.

$$P = C - G$$

If $P$ is positive, the tax is progressive since a tax which is more unequally distributed than income will lessen income inequality. A value of $P$ less than zero has the opposite effect, worsening income distribution, and is therefore regressive.

The contribution of each tax to the overall change in income inequality can be defined as:

$$\frac{G^* - G}{G} = \frac{- \sum_{i=1}^{n} P_i a_i}{(1 - a)G}$$

(Shown as %$G$ in Table 13)

where $a_i$ and $P_i$ are the average tax rate and the progressivity index of the $i$th tax respectively, and $a$ is the average tax rate for all taxes.

The percentage contribution of each tax to the overall progressivity of the tax system is estimated using the assumption that:

$$P = \sum_{i=1}^{n} \frac{a_i}{a} P_i$$

\(^{297}\) This approach to measuring tax progressively is called liability progression.
Table 13 details the impact of the tax changes over the period 1994-95 to 2001-02 on the progressivity of the different tax groups.

As noted above, the changing impact of tax on the distribution of income arises from two sources, the height of the tax (as reflected in $a_i$) and the distribution of the tax (as shown in $P$). Changes in either will cause changes in $G^*$. Table 13 provides estimates of changes in the progressivity of Australian taxes over the period of study. In the case of the personal income tax, its progressivity has increased, as has its average tax rate, which has resulted the income tax being more redistributive.

In the case of the reformed indirect taxes, they are both more regressive and more important, which has resulted in them worsening the post-income distribution. In the case of the “other taxes”, while they are more important, because they are less regressive and this falling regressivity offsets the growing importance of these taxes, their overall effect is to improve the post-tax distribution of income relative to their impact in 1994-95.

Complications

The Gini index based result presented in Table 13, while interesting, does mask one important issue noted earlier which is often a problem for Lorenz curve based measures of income inequality. This is shown in Table 14 and indicates that the Lorenz curve for gross income distribution in Australia in 1994-95 appears to cross that for 2001-02 at the 6th decile. In the case of ‘gross income less all taxes’, the Lorenz curves cross at the 8th decile. This result leads us to question the robustness of the results in Table 13. It also indicates that there has been a redistribution over the period studied from the middle deciles to the top and bottom deciles. Clearly, further study needs to be made into the results in Table 13 along with the estimation of alternative pre and post tax income inequality indices.

<table>
<thead>
<tr>
<th>Decile of equivalent gross income</th>
<th>Gross Income</th>
<th>Change in Share</th>
<th>Gross income less all taxes</th>
<th>Change in Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.7%</td>
<td>2.8%</td>
<td>0.1%</td>
<td>2.1%</td>
</tr>
<tr>
<td>2</td>
<td>6.9%</td>
<td>7.0%</td>
<td>0.0%</td>
<td>7.1%</td>
</tr>
<tr>
<td>3</td>
<td>11.9%</td>
<td>11.9%</td>
<td>0.0%</td>
<td>12.8%</td>
</tr>
<tr>
<td>4</td>
<td>17.4%</td>
<td>17.7%</td>
<td>0.2%</td>
<td>18.6%</td>
</tr>
<tr>
<td>5</td>
<td>24.5%</td>
<td>24.6%</td>
<td>-0.1%</td>
<td>25.8%</td>
</tr>
<tr>
<td>6</td>
<td>33.2%</td>
<td>33.1%</td>
<td>-0.2%</td>
<td>34.7%</td>
</tr>
<tr>
<td>7</td>
<td>43.5%</td>
<td>43.2%</td>
<td>-0.2%</td>
<td>45.2%</td>
</tr>
<tr>
<td>8</td>
<td>56.3%</td>
<td>55.6%</td>
<td>-0.4%</td>
<td>58.6%</td>
</tr>
<tr>
<td>9</td>
<td>72.8%</td>
<td>71.8%</td>
<td>-0.4%</td>
<td>76.0%</td>
</tr>
<tr>
<td>10</td>
<td>100.0%</td>
<td>100.0%</td>
<td>1.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
CONCLUSIONS

This paper focuses on changes in the level and distribution of the tax burden over the period 1994-95 to 2001-02.

What this paper has shown is that over a period of major economic and social change and significant tax reform - including the introduction of a 10% GST - the post-tax distribution of income in Australia has remained remarkably little changed.

Our analysis suggests that the magnitude of income tax collected from the average household increased and that income tax became more progressive. In the case of the reformed indirect taxes (primarily the GST), the magnitude of such taxes collected from the average household increased and the distribution of these reformed indirect taxes became more regressive. In the case of ‘other taxes’, primarily company tax, the magnitude of such taxes collected from the average household increased but these taxes became less regressive.

Overall, the taxes considered in this study appeared to become marginally more progressive and more redistributive over the seven years, with the increased progressivity and importance of the personal income tax offsetting the increased regressivity and importance of broad based indirect taxes.

Some important caveats underlie these results. First, our study was based on the ABS Household Expenditure Survey unit record files and, in addition to the sampling and non-sampling error present in all such surveys, we found some systematic differences between the two surveys and also found differences between these surveys and the Surveys of Income and Housing Costs undertaken during the same period. Second, in both 1994-95 and 2001-02 we imputed the rules and incidence of the tax and social security programs as well as uprated the income and housing data in the original HES surveys to the required years. Despite our best endeavours, this necessarily creates the need for additional caution when analysing the results. Third, while the distribution of the tax burden is of great interest, it is also important to look at the distribution of the government benefits financed from such taxes and we plan to do this in future work. Fourth, given the changes in household composition within the deciles it would be desirable to more closely analyse the experience of different household types. Fifth, while this is one of the most comprehensive studies of tax incidence undertaken in Australia, this study nonetheless still excludes some important taxes or tax expenditures for which we do not have the necessary data to impute their incidence, such as capital gains tax, fringe benefits tax and the superannuation tax concessions.

With the above caveats in mind, our key conclusion is that the distribution of the tax burden and the distribution of post-tax income appeared to be remarkably stable over the 1994-95 to 2001-02 period, despite the very fast pace of change in both the tax and transfer systems, the economy, and the socio-economic characteristics of households.
REFERENCES


ABS 2004, Household Income and Income Distribution 2002-03, Cat No 6523

ABS 2005, Australian Economic Indicators, Cat. No. 1350.0, ABS, Canberra.


Commonwealth of Australia, Prime Minister, Taxation Reform, Media Release, 28 May 1999.


APPENDIX A: METHODOLOGY

Core data sources
2001-02
The core data source used in the simulation of the 2001-02 world was the 1998-99 Household Expenditure Survey (HES) unit record file released by the Australian Bureau of Statistics. This file contains a snapshot of the demographic, labour force, income and other characteristics of the Australian population in 1998-99. It is important to note that the scope of the survey is restricted to those living in private dwellings and excludes those living in remote and sparsely settled areas. While it is likely that there were some minor demographic and labour market changes between 1998-99 and the target year of 2001-02, such changes were considered likely to have a negligible effect on the results. However, over three years the size of the population increased substantially over the three years and, accordingly, the original ABS weights were inflated by 3.823% in the study.298

1994-95
The core data source used in the simulation of the 1994-95 world was the 1993-94 Household Expenditure Survey unit record file released by the ABS. To account for increase in the size of the population, the ABS weights were inflated by 1.139% but the weights were not adjusted to take account of changes to population composition or labour market changes.

For both years, the income unit used in the study was the household.

Income and housing costs
2001-02
Private incomes from such sources as wages and salaries and investment income were uprated from the 1998-99 levels shown for each household in the HES to December 2001 estimates. The uprating was relatively detailed, with procedures generally following those used in uprating income and housing values within the STINMOD model (Bremner et al, 2002, p. 17).299 In the case of mortgages, for example, the uprating was in line with movements in ABS data from the Consumer Price Index Housing Series.

In addition we scaled private income to approximate the private income distribution in the latest ABS Survey of Income and Housing Costs.

1994-95
Private incomes were uprated from 1993-94 to 1994-95 using similar techniques.

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298 The ABS attaches a ‘weight’ to the record of each household included within the HES file, which represents the estimated number of comparable households in Australia that each record within the sample data represents. This allows the ‘grossing up’ of results from the sample survey to estimates for the entire population living in private dwellings. (The HES sampling frame excludes the institutionalised population, such as those living in nursing homes or prisons.)

299 During the past decade NATSEM has developed the STINMOD model, which is a static microsimulation model that simulates the current social security and income tax systems (Bremner et al, 2002; Beer et al, 2003, Lloyd 2003). The STINMOD model is used for assessing the distributional impact of policy changes by large Federal government departments, such as Family and Community Services and Treasury. A user-friendly version of the model is also publicly available. New versions of the STINMOD model are developed regularly, and one was created to run with the 1998-99 HES base data and was used in this study.
In both years, no attempt was made to adjust recorded HES income or expenditure amounts for likely under-reporting (e.g. of dividend income and cigarette expenditure).

**Social security and family payments**
The original ABS values for social security and family payments shown on the HES were not used in the study. They were replaced by the imputed cash transfers received by each household, estimated using NATSEM’s STINMOD model.

**2001-02**
The social security and family payments systems simulated were those applying in 2001-02. Accordingly, the study captures the many changes in the cash transfer system introduced as part of the GST tax reform package in July 2000.

**1994-95**
The social security and family payments systems simulated were those applying in 1994-95. The benefits were scaled so that 92.4% of total spending on government cash payments (as given by FACS Annual Report) was allocated to households, in line with aggregate cash payments allocated in 2001-02.

**Income tax and rebates**

**2001-02**
The estimated amount of income tax paid by each household in 2001-02 was also simulated, using NATSEM’s STINMOD model. Other major income tax provisions were also simulated, such as the Medicare levy, the low income tax offset and the pensioner and beneficiary rebates.

**1994-95**
The major income tax provisions applying in 1994-95 were simulated.

**Indirect taxes**

**2001-02**
To simulate the impact of the Commonwealth consumption based taxes (GST and Excise Duties) in 2001-02, the average tax rates were estimated for each of the 500 plus detailed expenditure categories in the HES.

The approach is based around the 1996-97 Input-Output data updated to 2001-02 National Accounts final demand and tax aggregates. The modelling approach adopted involves three steps.

Step 1 estimates a price model using 1996-97 Input-Output data. The indirect tax share of the value of 107 commodities in each of the seven final demand sectors is then estimated using this data but updated to 2001-02 using Australia National Accounts data.

Step 2 acknowledges that taxes can only be borne by individuals and then allocates those taxes which impact on the seven final demands\(^{300}\) in 2001-02 to Australian residents or non-residents households.

---

\(^{300}\) The seven final demands are private final consumption expenditure, government final consumption expenditure, private gross fixed capital expenditure, general government gross fixed capital expenditure, public enterprise gross fixed capital expenditure, change in stocks, and exports.
Step 3 estimates how the 2001-02 taxes that are estimated to fall on Australian resident households in Step 2 ultimately impact on the individual households as reported in the HES unit record data. This is done by estimating the effective indirect tax rates on the 107 Input-Output commodity classification and linking this classification to the commodity classification adopted in HES.

The ultimate output is a series of effective indirect tax rates that can be applied to the HES unit record data for 2001-02, enabling an estimation of the indirect tax burden for each household in the HES data.

One issue warranting clarification is the indirect taxes modelled. This is important because in any comparative study, a consistent definition should be adopted to enable a meaningful intertemporal (2001-02 vs 1994-95) comparison of the results to be made. It is here that this study confronts an important issue. As shown in Table 1, over the period of study, a substantial change was made in the mix of income tax and indirect taxes in Australia. Indirect taxes were significantly increased and income taxes cut, centring on the introduction of the GST. In addition, a number of State taxes were repealed and subsumed into the GST (including the Accommodation tax, stamp duties on shares, FID and in some states such as NSW, BADT). In return, the States received compensation through being allocated the revenue from the GST, which is distributed through the Commonwealth Grants Commission.

1994-95
To simulate the impact of all indirect taxes in 1994-95, the average tax rates was estimated for each of the 500 plus detailed expenditure categories in the HES.

The same three step modelling approach adopted for 2001-02 was also adopted in the case of 1994-95, in this case scaling down the Input-Output 1996-97 data to 1994-95.

As indicated in Table 2, all Commonwealth, State and local taxes were modelled over the period 1994-95 to 2001-02. Those indirect which were the target of numerous reforms over this period were separately identified in the table because these are of particular interest.
APPENDIX B: TAX SHIFTING ASSUMPTIONS

Table A.1 details the basic tax shifting assumptions adopted in the results reported in the body of this paper. The allocation of taxes to domestic households is a three stage process.

1. The allocation to 7 final consumers, of those taxes whose statutory incidence (who initially (or legally) pay the tax) is producers. These final consumers comprise domestic households, the government, industry and foreigners (Section A in Table B.1)

2. The allocation of the tax estimated to be incurred by these final consumers to domestic households (Section B in Table B.1)

3. The allocation of those taxes whose statutory incidence is on the domestic household sector to the domestic household sector (Section C in Table B.1)

Of those taxes incident on dividends paid by corporation operating in Australia, a proportion equal to the level of foreign ownership of incorporated enterprises in Australia are allocated to foreign households.

It has also assumed that while only persons in private dwellings were included in the households expenditure surveys, the composition of the included groups was not dramatically different from that of the population as a whole.

- PCEDIS allocated to households on the basis of their expenditure on a range of specific commodities
- TOTPCE allocated to households on the basis of their total consumption expenditure
- TOTINC allocated to households on the basis of their share in the burden of all taxes
- PCEINV allocated to households on the basis of their consumption of the goods produced in industries undertaking private investment
- PCEPUB allocated to households on the basis of their consumption of goods by public enterprises
- PCERAH allocated to households on the basis of their consumption of goods in which government invests
- FOREIGN taxes allocated to foreign households
- BUSINC allocated to households on the basis of their business income
- DIVIDEND allocated to households on the basis of dividend receipts
- WAGES allocated to households on the basis of wages and salary income
### TABLE B.1 Tax Shifting Assumptions

**A. Shifting of Taxes whose Statutory Incidence is on Producers**

<table>
<thead>
<tr>
<th>TAXES ON INTERMEDIATE INPUTS</th>
<th>PFCE</th>
<th>DIVIDENDS</th>
<th>BUSINESS INCOME</th>
<th>WAGES</th>
<th>TOTAL</th>
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<td><strong>TAXES ON IMPORTS FINAL DEMAND</strong></td>
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### B. Treatment of Taxes by Final Consumers when Shifted to Forward

#### FINAL DEMAND SECTOR SHIFTING OF TAXES

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<tr>
<th></th>
<th>PCEDIS</th>
<th>FOREIGN</th>
<th>DIVIDENDS</th>
<th>BUS INC</th>
<th>WAGES</th>
<th>TOTAL</th>
</tr>
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<td>Expenditure</td>
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<td>TOTINC</td>
<td>TOTINC</td>
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</tr>
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<td>2 Household Government</td>
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<td>0.75</td>
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<td>0</td>
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<td>3 GFKE Private</td>
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### C. Taxes with Statutory Incidence on Households

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<th>Business Income</th>
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<td>direct</td>
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<td>0</td>
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