

# How Highly Taxed Are We?

*The Level and Composition of  
Taxation in Australia and the OECD*

Peter Burn

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*Perspectives on Tax Reform (7)*

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## Foreword

In an interview with *The Sydney Morning Herald* on 7 August 2004, the Prime Minister was quoted as saying: 'I think we've been very generous in relation to tax. You never say never in this business, but I think it is fair to assume that we feel we have done quite a lot on tax.'

While it is true that the tax reform of 2000 which brought in the GST was a major step forward, it is disturbing that Mr. Howard apparently feels the task of fundamental tax reform is more or less completed. Many commentators and tax experts disagree with him, for the income tax system is still riddled with distortions and disincentive effects that cry out for serious attention.

Many would also disagree with Mr. Howard's claims about his government's 'generosity' as regards taxation. Federal government spending as a proportion of GDP is as high as it has ever been, and it threatens to go higher still as a result of the profligate promises made during the recent election campaign. This is reflected in the amount of tax we have to pay. The latest edition of The Centre for Independent Studies publication *State of the Nation* calculates that Australians have on average to work almost four months of every year to pay for the government's spending before they start to earn money for their own purposes.<sup>1</sup> If this is 'tax generosity' one shudders to think what 'tax exploitation' might look like. Even the bonded serfs of feudal Europe might have baulked at having to sacrifice this much of their working lives to their overlords.

There are, of course, some academics and journalists who agree with Mr. Howard's apparent view that our present tax burden is acceptable. Indeed, some argue it is too low and should be increased. The eminent economist and former Treasury adviser Michael Keating recently attracted a lot of attention, for example, when he claimed that tax in Australia is too low and that 'the Australian economy could tolerate a significant increase in the ratio of taxation to GDO without great difficulty'.<sup>2</sup> As Peter Burn shows in this latest in a series of CIS papers on tax reform, Keating is not alone, for pressure to increase total taxation has also come from those two old bedfellows, the Australian Council of Trade Unions and the Australian Council of Social Service.

All of these claims rest their case on comparisons between the level of taxation in Australia and the average level of taxation across all the OECD countries. When this simple comparison is made, it does seem to be the case that, although our government soaks up over 30% of all the wealth we produce each year, other governments are taking even more from their populations. Compared with the OECD average, Australians do appear to enjoy a 'low' tax regime.

Statistics, however, are slippery things, and simple averaging can conceal more than it reveals. Peter Burn points out that the OECD consists of a large number of relatively small European countries and a small number of much larger non-European ones, of which Japan and the USA are the prime examples. The European nations account for 76% of the OECD national membership, but for only 35% of the OECD's total GDP. Of the thirty countries in the OECD, 23 are in Europe, yet even when they are all put together they have a lower total GDP than the United States on its own.

Use of simple unweighted averages to compare Australia's tax burden with that of the rest of the OECD is therefore hugely misleading, for it takes no account of the size of different countries. A simple average will always over-emphasise the European pattern at the expense of the big non-European economies, because it treats a country like Luxembourg as the equivalent of a country like the United States. As Burn puts it, 'The only possible basis for the claim that Australia is a relatively low-taxing country is a Eurocentric one. While doubtless not deliberate, the use of the simple average of all OECD countries institutionalises the Eurocentric perspective and gives a distorted impression.'

Clearly, then, we need to take account of a country's size before we calculate average tax levels across the OECD, and this is what Peter Burn does in his paper. The results show that, weighting for the size of the GDP of the different countries, the average tax level across the

OECD nations is roughly the same as that found in Australia. Our tax level is lower than in most of Europe, but is higher than in the American and Pacific OECD countries. The countries with which Australia carries out most of its trade tend to have lower tax levels than we do, which suggests that we are over-taxed in comparison with our major economic competitors.

This analysis is crucially important, for it totally undermines the basis of the arguments that have repeatedly been put for raising Australian tax levels. Claims that we are a low taxed country compared with the OECD average are revealed as spurious, and we can only hope that academics and advocacy groups will not continue to make use of these misleading comparisons in the future.

Burn's paper does not stop there. He also shows that the *pattern* of taxation in Australia is out of line with that in most other OECD countries. In particular, we tax personal and company incomes much more highly than most other countries do. Even if other countries' social security contributions are counted in with their income tax levy (and Australia's compulsory superannuation contributions are left out), personal income tax turns out to be 34 per cent higher here than the OECD weighted average, and our tax on company incomes is 117 per cent higher.

In an extended postscript, Burn considers the impact the 2000 tax reforms on our heavy reliance on the taxation of incomes. He shows that the New Tax System reforms have not reduced the heavy reliance on income taxation. Personal income taxation has continued to grow strongly and, most noticeably, the period since since 2000 has been characterised by a distinct increase in the reliance on taxes on corporate income. These changes have occurred alongside a continuing upward drift in the overall share of taxation in GDP.

Rather than establishing the case for even higher taxes on earnings, a careful analysis of OECD statistics shows what many Australian workers and businesses have long suspected; we are being squeezed much harder than our contemporaries in many other comparable countries, and there are particularly severe tax burdens on our incomes. With a renewed three year mandate and control of the Senate, the Howard government should treat the reduction of these burdens as a key policy priority. The task of tax reform was not completed in 2000. It has only just begun.

**Peter Saunders**  
Social Research Director  
The Centre for Independent Studies

## Executive Summary

**T**axation imposes costs. Some of these arise from its effects on international competitiveness, for taxes embed themselves in prices and incomes and thereby bear on the international competitiveness of tradable goods and services and the attractiveness of investment opportunities. Taxation also tends to distort decision making in ways that detract from productivity growth. Although an indirect influence the sheer dimensions of modern taxation imply that this efficiency loss has a further significant adverse impact on international competitiveness.

It has often been argued that Australia is a relatively low tax country compared with other members of the Organisation for Economic Cooperation and Development (OECD), but this is misleading, for it takes no account of the different sizes and importance of different OECD economies.

When comparisons are made weighting for the size of the economy of each OECD country, two key findings emerge:

- The level of Australian taxation is about the same as the weighted average level of tax in all OECD countries. Australia is, however, more heavily taxed than our most important OECD trading partners.
- Australia has a relatively high level of income taxation. This is true of both personal and corporate tax bases. Australia's reliance on taxes on personal and corporate incomes is distinctly higher than OECD averages.

This pattern of taxation puts us at a serious disadvantage in relation to other countries. In an increasingly global operating environment, an excessive reliance on the most mobile tax base—the income tax base—is clearly a competitive disadvantage.

These findings relate to a pattern of taxation that has only recently been the subject of extensive reforms. The postscript to this paper discusses the impact of the New Tax System changes. While the New Tax System introduced major improvements, it did not address Australia's excessive reliance on income taxation. Analysis of revenue collections since 2000 shows there has been no marked reduction in the level of income taxation and a very strong increase in income taxes paid by corporations.

The heavy reliance on income taxation in the Australian tax system remains its fundamental shortcoming.

## HOW HIGHLY TAXED ARE WE?

### THE LEVEL OF TAXATION IN AUSTRALIA<sup>3</sup>

In recent years Australia's level of taxation has edged upwards within a range of 29.6 percent and 31.8 percent of Gross Domestic Product (GDP).

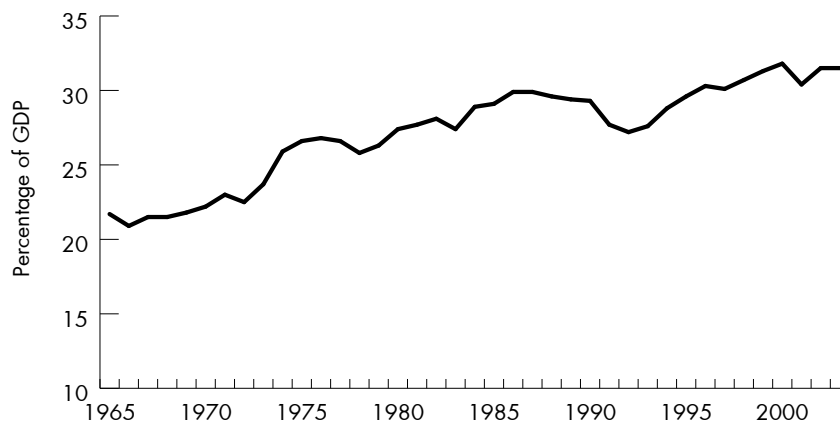
**Table 1: Total Taxation<sup>4</sup> as a Proportion of GDP, Australia 1995-6 to 2002-03**

1995-6	1996-7	1997-8	1998-9	1999-0	2000-1	2001-2	2002-3
29.6%	30.3%	30.1%	30.7%	31.3%	31.8%	30.4%	31.5%

Source: OECD, *Revenue Statistics, 1965-2003* (2004), p.68.

Current levels of taxation can be contrasted with total revenue collections over the years since 1965-6. Chart 1 shows total Australian taxation as a share of GDP from 1965-6 to 2002-03.

**Chart 1: Total Australian Taxation as a Proportion of GDP (1965-6 to 2002-3)**



Source: OECD, *Revenue Statistics, 1965-2003* (2004), pp.67-8.

Over the period since 1965, the share of total Australian taxation in GDP has grown on average by slightly more than a quarter of a percentage point of GDP per year. The growth of the share of taxation in GDP comes on top of the solid growth of GDP which increased by over 250% in real terms between 1965 and mid 2003.<sup>5</sup> In real terms, the amount of tax paid per person<sup>6</sup> grew by around 185%.

#### Comparisons with OECD countries based on unweighted averages

Despite the increase in taxation over the years, it is often claimed that Australia is relatively lightly taxed. These claims almost invariably involve a comparison of Australian taxation levels with those of other members of the Organisation for Economic Co-operation and Development (OECD). In a recent article, for instance, the respected policy economist Michael Keating described Australia as 'being low-taxed relative to most other developed market economies'.<sup>7</sup> In its analysis of taxation, the Australian Council of Trade Unions (ACTU) put forward the proposition that:

OECD data shows that Australia is a low tax country. The latest available figures (for 2000) show total tax revenue in Australia amounting to 31.5% of GDP. By comparison the OECD average is 37.2% of GDP, Canada has a total tax revenue equal to 38.7% of GDP, and Sweden has a total tax revenue equal to 52.2% of GDP.<sup>8</sup>

Similar claims have been made by the Australian Council of Social Service (ACOSS) which suggests that, 'By OECD standards, Australia is a low tax country.'<sup>9</sup>



Chart 2 sets out the major data source behind the claims that Australia is a low-taxing country. The data show that in 2002 (the most recent year for which complete comparisons of OECD countries can be made) Australia was the eighth-lowest taxing of the 30 OECD countries. Australia's level of taxation in that year, at 31.5 percent was distinctly lower than the simple (that is, unweighted) average for all OECD countries which stood at 36.3 percent of GDP. This comparison and comparisons based on similar data for earlier years lie behind assertions such as Michael Keating's that Australia 'could tolerate a significant increase in the ratio of taxation to GDP without great difficulty'.<sup>10</sup>

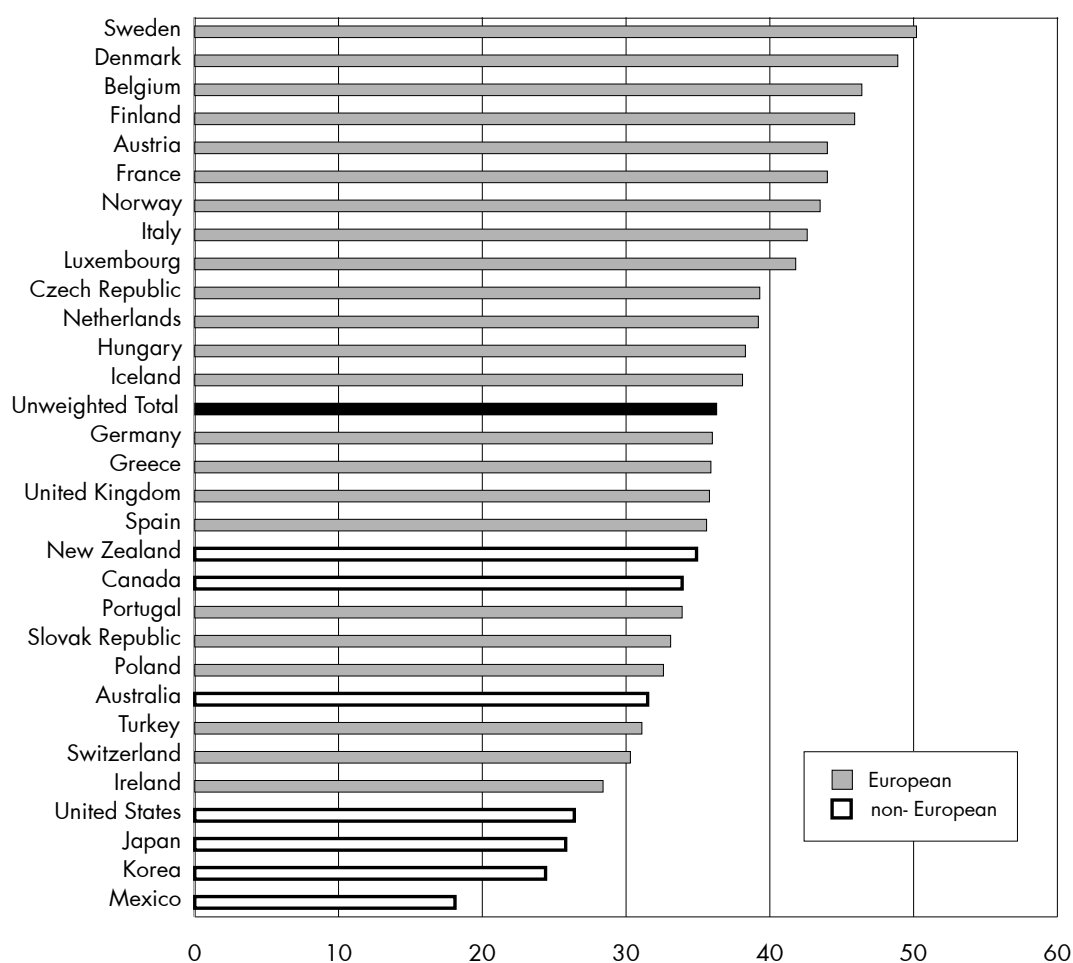
One obvious shortcoming with this and similar claims is that the OECD is a sample of only 30 countries. Thailand, India, Indonesia, Malaysia and Singapore, for instance, are not part of the OECD. China, as Australia's fastest growing and perhaps most challenging trading partner, is similarly left out of the equation. Given that around 35 percent of Australia's trade is conducted with non-OECD countries, conclusions about Australia's relative level of taxation based only on OECD comparisons should be treated with considerable caution.

Nevertheless, the extensive links between Australia and other OECD countries ensure that comparisons with these countries is a highly relevant starting point in international comparisons of taxation.

### Are there two OECDs?

Chart 2 illustrates that Australia ranks with the lower-taxing OECD countries and sits well below the unweighted average for all OECD countries. It also shows that there are clear differences between European and non-European OECD members.<sup>11</sup>

**Chart 2: Share of Total Taxation in GDP in 2002 (Australia 2002-03)**



Source: OECD, *Revenue Statistics, 1965-2003* (2004), p.68.

Most (four out of seven) of the OECD countries with lower levels of taxation than Australia also have a Pacific coast. These are the United States, Japan, Korea and Mexico. The only other countries with a Pacific coast (Canada and New Zealand) also have levels of taxation below the unweighted average for all OECD countries. The highest-ranking of the seven non-European countries (New Zealand) ranks as the thirteenth lowest of the 30 member countries.

In recognition of the regional differences within its membership, the OECD publishes data relating to three major OECD sub-groups—OECD Europe, OECD Americas, and OECD Pacific. Table 2 contrasts the unweighted average level of taxation for the OECD as a whole with the unweighted average levels of the sub-groups.

**Table 2: Total Taxation as a Proportion of GDP (2002)  
Unweighted Averages for OECD and OECD Sub-Groups**

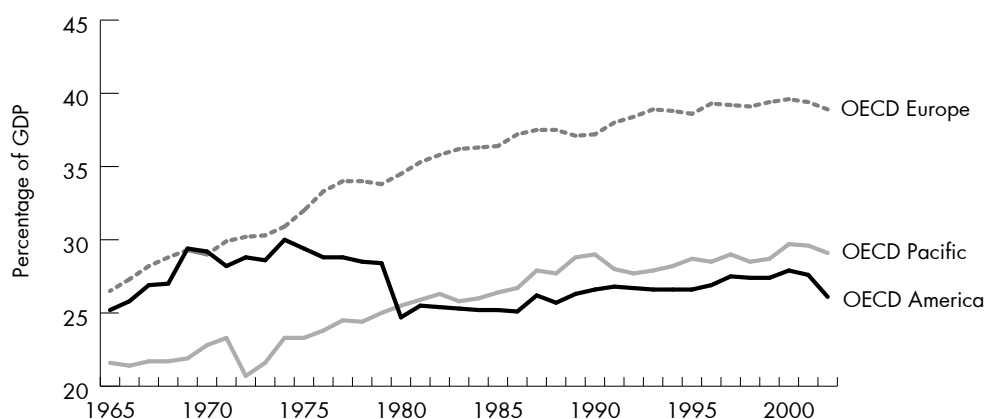
	<i>Share of Tax in GDP (unweighted averages)</i>
<i>OECD Total</i>	36.3%
<i>OECD Americas</i>	26.1%
<i>OECD Pacific</i>	29.1%
<i>OECD Europe</i>	38.9%

Source: OECD, *Revenue Statistics, 1965-2003* (2004), p.68.

Overall taxation levels in the OECD Americas group (the US, Canada and Mexico) and the OECD Pacific group (Japan, Korea, Australia and New Zealand) are clearly well below the unweighted average level of taxation among the European OECD members. Australia's level of taxation as a share of GDP is higher than the unweighted averages of both non-European sub groups.

In recent decades this regional division has been remarkably stable. This is clear from the unweighted average taxation levels between 1965 and 2002 presented in Chart 3. This demonstrates a tendency since the mid 1970s for the unweighted average levels of taxation for two non-European OECD sub groups to converge towards a level noticeably lower than the unweighted average of the European countries.<sup>12</sup>

**Chart 3: Total Taxation as a Proportion of GDP 1965-2002 Unweighted averages for OECD sub groups**



Source: OECD, *Revenue Statistics, 1965-2003* (2004), pp.67-8.

The evidence presented in Table 2 and in Chart 3 lends strong support to the view that, as far as taxation levels are concerned, there are two OECDs: a European group and a non-European group. Countries in the latter group, which includes Australia, have been, and remain, consistently lower taxing than their European counterparts.

### OECD comparisons using weighted averages

While the use of the unweighted averages for the OECD sub-groups is a rough correction for some of the variations between different countries and groups of countries, it makes no allowance for the vast differences in size and economic significance of different countries. This disparity exposes a fundamental shortcoming with the use of the unweighted OECD data to make comparisons of taxation levels.

To illustrate with reference to the extremes: in the unweighted averages the gulf between the United States and Luxembourg is overlooked even though the US, which accounts for approximately 40% of the total GDP of all OECD countries, is close to 500 times larger than Luxembourg (approximately 0.08% of total GDP of OECD countries). As far as international comparisons are concerned, the overall level of taxation in the US (26.4%) is of far greater significance than that of Luxembourg (41.8%), yet an unweighted average will treat them as equivalent.

Similarly, when comparing the competitiveness of Australia's level of taxation with that of other countries, it is clearly inappropriate to give equal weight to Japan and Mexico. Japan (with a tax to GDP ratio of 25.8%), accounts for over 26% of Australia's trade with OECD countries and Mexico (which collects a level of tax equivalent to 18.1% of GDP) does not trade enough with Australia to register on its Trade Weighted Index.

While not without their own difficulties, various approaches to weighting can attenuate these shortcomings. Two alternative methods of weighting the raw tax data are:

- a weighting by the relative size of different economies with weights set according to the proportion of individual countries' GDP to the GDP of all OECD countries. (See Appendix B, p.18 for a discussion of data sources and methodology.)
- weighting according to the relative shares of Australian trade with OECD countries with individual proportions related to the shares of OECD countries in the Australian Trade Weighted Index (TWI). (See Appendix C, p.20 for a discussion of data sources and methodology.)

The GDP-based measure gives the greatest weights to levels of taxation in the largest economies. The two largest OECD countries account for around 54% of the total GDP of all OECD countries.<sup>13</sup> Both are non-European and both are lightly taxed relative to other OECD countries. It is therefore not surprising that weighting by relative economic importance has a noticeable impact on the measurement of the average level of taxation raised in OECD countries. As shown in Table 3, the average level of taxation for the OECD when adjusted for economic size is 31.0% of GDP compared with the unweighted average of 36.3%.

**Table 3: Total Taxation as a Proportion of GDP (2002)  
Comparison of Unweighted and Weighted Averages**

	<i>Unweighted Average</i>	<i>Weighted Averages</i>	
		<i>(by GDP)</i>	<i>(by TWI)</i>
<i>OECD Total</i>	36.3%	31.0%	30.5%
<i>OECD Americas</i>	26.1%	26.4%	27.2%
<i>OECD Pacific</i>	29.1%	26.2%	27.2%
<i>OECD Europe</i>	38.9%	39.0%	38.2%

Sources: See Appendices A and B.

The second weighting method, also recorded in Table 3, is based on countries' relative importance in Australia's trade. As noted above, the OECD accounts for about two thirds of all Australia's trade. The trade-weighted approach provides a measure of the competitiveness of the Australian tax level relative to level of taxation imposed in those OECD countries with which we trade. The weighted average level of taxation among OECD countries based on this measure is 30.5%.

### **Is Australia really a 'low-tax country'?**

The analysis to date suggests strongly that Australia is not a low-tax country even in the company of fellow OECD members. In fact, with a level of taxation to total GDP that has hovered between 30% and 31.5% over recent years, Australia's total level of taxation is broadly comparable with the weighted average level of taxation of the OECD as a whole and is distinctly higher than the weighted averages of both non-European sub-groups.<sup>14</sup>

- Australia's overall level of taxation in 2002 was higher than the weighted average of all OECD countries by 1.7% on a GDP basis and by 3.4% on a trade weighted basis.
- Relative to the weighted average on the GDP basis, Australia's overall level of taxation was 19% higher (16% higher on a TWI basis) than the OECD Americas sub group.
- Australia's level of taxation was 20% higher than the GDP-based weighted average for the OECD Pacific group (15.5% on a TWI basis).
- Under these measures Australia was lower taxing than the OECD European countries by 19.2% on the GDP basis and by 17.6% on the trade weighted basis.

The only possible basis for the claim that Australia is a relatively low-taxing country is a Eurocentric one. While doubtless not deliberate, the use of the simple average of all OECD countries entrenches the Eurocentric perspective and gives a distorted impression. The unweighted average of all OECD countries attaches undue influence to the 23 European members of the 30-strong OECD which comprise 76% of OECD membership. However, the European countries only account for around 36% of the GDP of all OECD countries. Furthermore, these 23 countries combined account for only around 19% of Australian trade (compared with around 35% of Australian trade for the non-European OECD countries).

When measured on a weighted basis, therefore, the OECD data do not provide empirical support for the frequently-repeated claim that Australia is relatively low taxing. Rather, Australia's level of taxation is about the same as the weighted average level of taxation of all OECD countries, and it is considerably higher taxing than the two largest OECD countries.<sup>15</sup> These countries—the United States and Japan—are also Australia's two largest trading partners (and Korea, which is also lower taxing than Australia, is the fourth largest of Australia's OECD trading partners).<sup>16</sup>

There is certainly no support here for Michael Keating's claim (referred to earlier) that international comparisons suggest that Australia could 'tolerate a significant increase in the ratio of taxation to GDP without great difficulty'. On the contrary, a leading risk of a significant rise in the overall level of taxation in Australia is an adverse shift in Australia's competitiveness relative to other developed countries and relative to our largest and closest trading partners.<sup>17</sup>

### **A note on tax and income redistribution**

Given the importance of taxation in overall income redistribution it is worth noting that the comparability of Australia's level of taxation with average OECD levels does not imply a similarly comparable redistribution system. As Peter Whiteford and Gregory Angenent observe:

'it is the quantum of redistribution, not the quantum of taxes or benefits separately, that determines the redistributive effects of a tax-benefit system. Redistribution is a function of the distribution of the differences between taxes and benefits as a proportion of income.'<sup>18</sup>

The present paper should not, therefore, be taken to have a direct bearing on the degree of redistribution in Australia. In particular, the 'radically redistributive' nature of Australian income support arrangements would need to be taken into account in an analysis of overall redistribution.<sup>19</sup>

## **THE COMPOSITION OF TAXATION IN AUSTRALIA**

Just as the level of taxation impacts on international competitiveness, the composition of taxation is also significant. Different kinds of taxes have varying impacts on commercial decisions and behaviour and therefore also on general economic efficiency.

In a global context, the international mobility of tax bases is particularly important.<sup>20</sup> Income, particularly investment income, is the most mobile of tax bases both because financial markets are increasingly global in orientation and because decisions relating to physical investments are taken in an environment of expanding opportunities for alternative locations.

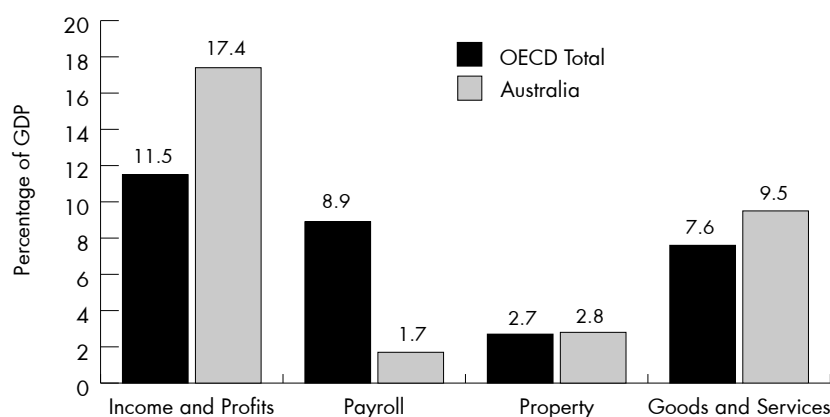
Labour markets, while less global than capital markets, are also increasingly subject to international mobility. The international mobility of senior executives, business service providers, scientists and technologists is well-known. There are also increasing international opportunities for people in occupations as diverse as nursing, teaching and truck driving to shift across countries in pursuit of higher net incomes.

### Comparison with OECD countries

Comparisons of the composition of taxation in OECD countries are clouded by the OECD's treatment of social security levies as a separate category of taxation. These contributions are levied either on an income tax base or on a payroll tax base.<sup>21</sup> For the purposes of the analysis that follows, social security contributions for member countries are incorporated into their constituent income and payroll tax bases (the data sources and methodology employed are discussed in Appendix D).

The composition of Australian and OECD taxation is summarised in Chart 4. The measures for the OECD as a whole are the weighted averages (on a GDP basis) of the degree of reliance on various tax bases.

**Chart 4: Composition of Taxation 2002  
Australia and OECD Weighted Averages (GDP basis)**



Source: OECD, *Revenue Statistics, 1965-2003* (2004). See Appendices B and D.

This comparison reveals clear disparities between the composition of Australian taxation and that of other OECD countries.

- The level of income taxation in Australia is about 52% higher than the weighted average for all OECD countries.
- Reliance on the payroll tax base is around 19% of the weighted average level for the OECD. (As discussed in Appendix A, the OECD does not include Australia's Superannuation Guarantee (SGC) as a tax. The SGC is, nevertheless tax-like in that it is a compulsory charge on employers, and it is levied on a payroll base. Appendix A suggests that the amount of SGC in 2001 was around 3.8% of GDP. If the SGC is taken into account, the extent of Australia's lower reliance on payroll taxes is reduced significantly, although it is still well below the OECD weighted average).
- The level of property taxation is marginally higher than the OECD weighted average.
- The level of consumption taxation is noticeably higher than the OECD weighted average (by around 25%).

**Table 4: Composition of Taxation: Australia, OECD and OECD Sub Groups, Weighted Average (GDP Basis) 2002**

	Australia	OECD Average	OECD Americas	OECD Pacific	OECD Europe
<i>Weighted Average (% of GDP)</i>					
Total Income Taxation	17.4	11.5	11.7	8.6	12.7
Individual income	12.1	9.0	9.8	5.3	9.9
Corporate income	5.3	2.4	1.9	3.3	2.7
Consumption Taxation	9.5	7.6	5.1	6.1	11.4
Payroll Taxation	1.7	8.9	6.6	8.5	11.9
Property Taxation	2.8	2.7	3.0	2.8	2.2

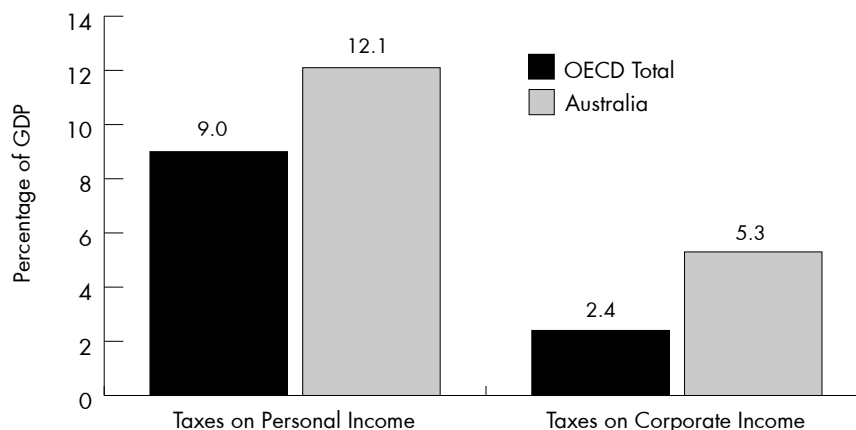
Source: OECD, *Revenue Statistics, 1965-2003* (2004). See Appendices B and D.

Table 4 shows the composition of taxation is significantly different between the three OECD sub-groups.

- Australia's level of income taxation is distinctly higher than for any of the sub-groups and is particularly higher than the weighted average of the OECD Pacific group (dominated by Japan).
- Relative to the OECD Americas group, Australia's lower level of payroll tax is somewhat offset by a higher level of consumption taxation. Australia's level of property taxation is somewhat lower.
- The OECD Pacific as a whole has a heavier use of payroll tax and a lesser use of consumption taxation than Australia.
- Australia has a much lower reliance on payroll tax than the average of the European OECD countries and a somewhat lower use of the consumption tax base. Australia has a relatively greater recourse to property taxation than the OECD Europe group.

#### **Australia's relatively heavy reliance on the personal and corporate income tax bases**

Australia's comparatively heavy use of the income tax base applies to the taxation of personal income and the taxation of corporate income. Relatively high tax burdens are imposed on both of these tax bases. Chart 5 contrasts Australia's level of taxation on personal and corporate income with the weighted average for all OECD countries.

**Chart 5: Personal and Corporate Taxation (2002), OECD Weighted Averages (GDP basis) and Australia**

Source: OECD, *Revenue Statistics, 1965-2003* (2004), See Appendix A and C for further details.

- Australia's level of personal income taxation is around 34% higher than the weighted average of all OECD countries.
- The level of taxation on corporate income in Australia is around 117% higher than the weighted average of OECD countries.
- This heavy recourse to income taxation occurs despite Australia having an overall level of taxation that is broadly comparable with the OECD average.

To some extent the high level of taxation on corporate income in Australia reflects the incentives built into the imputation system. About one third of OECD countries have imputation systems and several others have other forms of relief from the double taxation of corporate income. Greece for instance exempts dividends from tax at the individual level. Other factors, such as the role given to flow-through business entities and the relative size of the incorporated sector can also impact on the differences in the distribution of income and income tax between the company and personal levels.<sup>22</sup>

These factors mean that direct comparison of different levels of corporate income taxation is somewhat hazardous. While the level of corporate taxation is clearly of relevance to international competitiveness, in some respects the total level of income taxation is a more revealing measure. In 2002 Australia's total level of income tax was more than 50% higher than the OECD weighted average.

### **Implications of Australia's high reliance on income taxation**

Australia's high reliance on income taxation is a challenge to international competitiveness and to domestic economic efficiency.

- In an increasingly integrated global economy, relatively high income taxation is a barrier to inbound international investment.<sup>23</sup>
- Just as importantly, given the growth in opportunities abroad for Australian companies, high levels of income taxation is an impediment to outbound investment from an Australian base.<sup>24</sup>
- High levels of income taxation are barriers to attracting skilled migration whether of a permanent or temporary character. Similarly, high personal income taxation is an obstacle against the retention of highly sought-after Australian talent.
- High reliance on income taxation dictates recourse to high marginal rates of income taxation and thereby implies relatively high distortions to work, investment and saving decisions.
- When, as is the case in Australia, a high proportion of individual taxpayers face marginal income tax rates well in excess of the company tax rate, further distortions are imposed on decisions relating to business structure.
- High rates of income taxation also create incentives to under-report income and otherwise minimise tax liabilities.
- High income taxation, particularly of companies, adds disproportionate costs and difficulties to administration and compliance.<sup>25</sup>

These disadvantages of Australia's high income taxation present substantial challenges to policy makers. There is clearly solid comparative evidence to suggest a need to move the Australian tax system away from its high reliance on income taxation.

## **CONCLUSION**

Broad comparisons with tax collection in other developed countries reveal two general facts about Australia's pattern of taxation:

- The level of Australian taxation is broadly comparable with the weighted average level of tax in all OECD countries. Australia is, however, more heavily taxed than our most important OECD trading partners.

- Australia has a relatively high level of income taxation. This bias is shared between the personal and corporate tax bases. Australia's recourse to both these tax bases is distinctly higher than OECD averages.

This pattern of taxation is a serious flaw in Australia's social infrastructure. In an increasingly global operating environment, an excessive reliance on the most mobile tax base—the income tax base—is a competitive disadvantage.

There is, therefore, considerable scope for further improvement to the structure of Australian taxation. The central focus of further reforms should be a reduction in the entrenched over-reliance on income taxation.



## POSTSCRIPT: THE IMPACTS OF THE NEW TAX SYSTEM REFORMS

### Introduction

In 1997 Australia embarked on a major period of taxation reform with the key changes applying from 1 July 2000. The New Tax System involved several changes to Australian taxation:

#### Consumption Taxation

- The new Goods and Services Tax (GST) replaced a number of other taxes and financed a switch in the tax mix towards consumption taxation. The consumption taxes replaced by the GST included the Wholesale Sales Tax (WST) and Accommodation levies. A number of taxes on financial transactions were also removed or earmarked for review by 2005 (see below).
- Major changes were made to excises and related charges including a replacement of the franchise fees that were ruled unconstitutional in 1997; there were some reductions in some indirect taxes to offset impacts of the GST and a decrease in fuel excise and the removal of fuel excise indexation were granted.

#### Property and Financial Transaction Taxation

- Some of the stamp duties and financial transaction taxes levied by the states and territories were removed or are scheduled for removal. Stamp duties on quotable securities and Financial Institutions Duties were removed while Bank Account Debits Taxes either have been, or will soon be removed. Some of the States and Territories have independently moved to remove other stamp duties.<sup>26</sup> A range of other taxes on business transactions is currently under review.

#### Personal Income Taxation

- In 2000 there were relatively significant reductions in personal income tax. These reductions were partly to compensate for the net price impacts of the changes in indirect taxation.
- The method of capital gains taxation for individuals was overhauled. The previous concessions of averaging and indexation were replaced with the 50% discount method. Deductibility of capital losses remains quarantined and was halved for assets held for more than twelve months.
- Imputation credits became fully refundable.

#### Corporate Income Taxation

- The company tax rate was reduced in two steps from 36% to 30%. This was at least offset by the removal of accelerated depreciation and the introduction of a variety of other base-broadening measures. Previous grouping provisions were replaced with a consolidated tax regime and some tax barriers to inward and outbound investment have been addressed or are in prospect.
- The taxation of capital gains at the corporate level was changed in a number of ways. Indexing was removed and full nominal gains became subject to tax at the company rate. A discount method was introduced for superannuation funds under which funds became liable for tax on two-thirds of capital gains. Specific capital gains tax concessions were introduced for small businesses.
- More comprehensive income tax withholding/installment arrangements were introduced and aligned with the periodic collection of GST revenues.

### Revenue Collections 1998-99 to 2002-03: Level of collections

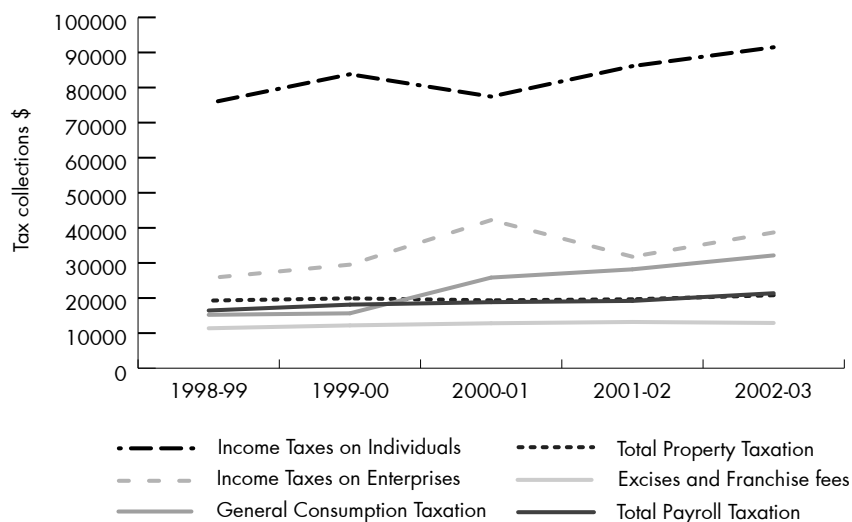
While some of the implications of these reforms are still playing themselves out and any examination of the impacts of reforms must therefore be tentative, some insights can be gleaned from an examination of data from the years surrounding the major changes.

Tax collections as a proportion of GDP rose from 30 percent in 1998 to 31.5 percent in 2002-03.<sup>27</sup> This is a pace of increase slightly above the post-1965 trend of about one quarter of a percentage point per year observed at the outset of this paper. Several factors appear to have contributed to this rise in taxation as a share of GDP.

- Nominal incomes have risen strongly.
- Fiscal drag increased personal income tax collections as larger shares of income became subject to tax at higher marginal tax rates. To some extent this was offset by the 2000-01 income tax reductions.<sup>28</sup>
- Consumption and GST collections have risen faster than GDP as increases in wealth and borrowing have underwritten a boost to purchasing capacity.
- The effective rate of tax on corporate income has increased by around 12.5%.<sup>29</sup>

### Revenue Collections 1998-99 to 2002-03: The composition of taxation

**Chart 6: Main Components of Australian Taxation 1998-99 to 2002-03**



Source: ABS, *Taxation Revenue*, Cat. No. 5509.0 (2004).

In broad terms there have been upward trends in personal income taxation; income tax paid by enterprises and general consumption taxation. Excises, property taxation and payroll taxation remained relatively flat.

- The break in the general upward trend in personal income tax collections mainly reflects the New Tax System income tax cuts which were effective from the start of the 2000-01 year.
- The general upward drift in individual income tax collections is largely due to the growth in money incomes and the underlying impacts of fiscal drag.
- Other than in the 2000-01 year, income taxes on enterprises grew relatively constantly over the reform period. The greater increase in the major year of taxation reform (and the return to trend in 2001-02) largely reflects the bring-forward of company tax revenue collections in that year associated with the introduction of the new withholding system (Pay As You Go).
- General consumption taxation stepped up distinctly in 2000-01 year in line with the replacement of the WST with the GST. The pace of increases in nominal collections eased after that year.

This outline suggests that, in the major year of taxation reform—2000-01—the rise in consumption tax collections and the bring-forward of company tax payments kept the budget coffers full while allowing relatively generous personal income tax payments and real increases in income support, particularly for families.

**Table 5: Change in Collections from Different Tax Bases  
1998-99 to 2002-03**

	<i>Trend rate of increase in nominal collections (% p.a.)</i>	<i>Change in share of total taxation (percentage point change from 1998-9 to 2002-3)</i>
<i>Income Taxation</i>		
Income tax on enterprises	10.8%	+2.0
Income tax on individuals	4.9%	-3.4
<i>Total Income Taxation</i>	6.4%	-1.5
<i>Payroll Taxation</i>		
States and territory payroll taxes	4.7%	-0.4
<i>Total Payroll Taxes</i>	3.2%	-0.9
<i>Property Taxation</i>		
Immovable property	6.5%	-0.1
Financial & capital transactions	7.0%	0.0
<i>Total Property Taxation</i>	6.8%	-0.1
<i>Consumption Taxation</i>		
General consumption	20.6%	+5.1
Excises and Franchise Fees	1.9%	-1.9
International transactions	11.4%	+0.3
Insurance	11.7%	+0.2
Gambling	-1.9%	-0.7
<i>Total Consumption Taxation</i>	9.5%	+2.6
<b>TOTAL TAXATION</b>	7.2%	

Source: Derived from ABS, *Taxation Revenue*, Cat. No. 5509.0 (2004).

Table 5 summarises the trend rate of growth rate of revenue collections. The total growth of 7.2% per year in nominal terms reflects both the strong growth of GDP and the increase in total collections as a share of GDP between 1998-99 and 2002-03.

#### Income Taxation

While income taxation grew at a trend rate of 6.4% per year in nominal terms over the period between 1998-99 and 2002-03, the share of income taxation in total Australian collections fell by 1.5 percentage points. The large personal income tax reductions of 2000-01, which included compensation for the price impacts of the GST, were the major factor in this decline. Extensions to the Family Tax Benefit also tended to reduce the share of personal income tax (see Appendix A). Although difficult to assess, the changes in the nature of the capital gains tax concession for individuals may have also contributed to a fall in the relative share of income tax collections.<sup>30</sup> Notwithstanding these forces, nominal income tax collections from individuals grew at a healthy trend rate of almost 5% per year over this period.

In nominal terms income taxation on enterprises grew very strongly at a trend rate of 10.8% per year. This underwrote an increase of two percentage points in the contribution of this source of revenue to total collections.

#### Payroll Taxation

Payroll tax collections declined as a share of total collections. A sharp reduction in recorded Fringe Benefits Tax collections in the 2002-03 year was a significant factor behind the slower growth of total payroll tax collections relative to the growth of payroll taxes levied by the states and territories.<sup>31</sup> Revenue raised by the latter group of payroll taxes grew quite strongly at a trend rate of 4.7% per year over this period.

#### Property and Financial Transaction Taxation

Taxes on property and on financial transactions also grew strongly. The relative contribution of these tax bases did not change noticeably during the period between 1998-99 and 2002-03. This

overall stability disguises two counteracting forces. Rising real estate prices fuelled an increase in collections from stamp duties on conveyances while the removal of Financial Institutions Duties and stamp duties on quotable marketable securities from 1 July 2001 acted to reduce taxes on other financial transactions.

### Consumption Taxation

Taxes on consumption increased substantially both in nominal terms and as a share of total taxation. The growth of consumption taxation was dominated by the GST. Against this there was a distinct fall in the share of excises and franchise fees and of gambling taxes.<sup>32</sup> The high rate of increase in nominal consumption tax collections was associated with a 2.6 percentage point increase in the contribution of this tax base to total collections.

### **Two steps forward and one step back?**

Over its initial years, the broad impacts of the New Tax System reforms have been to reduce the relative share of income taxation slightly and to raise the relative share of consumption taxation. These changes disguise important compositional changes within these two tax bases.

- The relative importance of taxation of general consumption has increased markedly while the combined contribution of taxes on fuel, cigarettes, alcohol and gambling has diminished in relative importance.
- The relative importance of taxation of personal income has fallen somewhat as it has been slightly exceeded by the pace of growth of nominal GDP over a period when taxation as a proportion of GDP has risen.
- The relative emphasis of taxes on corporate income has risen markedly.

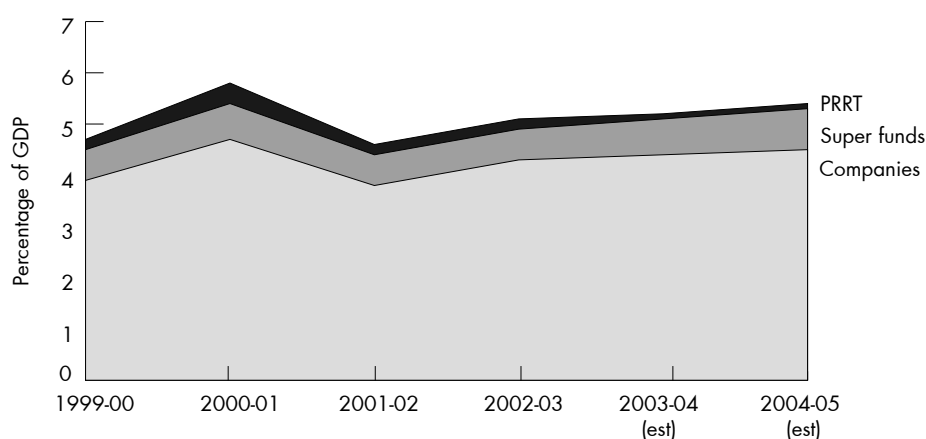
The shift to a more rigorous consumption taxation system, while clearly a major advance on the previous arrangements, is largely a one-off gain. Over time, the rising importance of (largely exempt) health expenditure will tend to reduce the relative growth of consumption taxation. The removal of the indexation of fuel excise will undermine the share of consumption taxation in total collections. It appears that further increases in the share of consumption taxation would rely largely on adjustments to the tax base or rates.<sup>33</sup>

While the decrease in the share of income taxation is a move in the right direction, there are several features that offset the value of these gains.

- The fall in the proportion of income taxation in GDP has been marginal.
- The growth of income taxation paid by enterprises is of considerable concern. On the surface at least it suggests the New Tax System reforms to business taxation were not revenue neutral but revenue enhancing. This appearance can be assessed by looking more closely at income taxes levied on enterprises in recent years.

### **Impacts of the New Tax System on the taxation of corporate income**

A breakdown of the components of the taxation of corporate income in Australia over in recent years is summarised in Chart 7. The Chart shows that over the years from 1999-2000 to the end of 2004-05, company tax collections are set to rise from 3.9% to 4.5% of GDP. Taxation of superannuation funds is also set to increase - from 0.6% to 0.8% of GDP. Collections from the Petroleum Resource Rent tax are on a downward trajectory and are set to fall by 0.1% of GDP. Combined, income taxation paid by enterprises is set to rise from 4.7% to 5.4% of GDP.

**Chart 7: Taxation of Enterprises 1999-2000 to 2004-05 (percentage of GDP)**

Source: Commonwealth of Australia, 2004, *2004-05 Budget Paper No.1*, p.5-37.

### Taxation of Superannuation Fund Income

The increase in income taxes paid by superannuation funds was not significantly impacted by the New Tax System changes. Taxation of these income streams, which dates from the late 1980s, is an important feature of Australian taxation and one not shared by many other OECD countries (generally pension funds are exempt from taxation so that beneficiary accounts accumulate at pre-tax rates of return).

A significant part of the greater-than-average taxation of corporate income in Australia relative to other OECD countries is explained by the taxation of superannuation funds. In 2000-01 for example, Australia's level of taxation on corporate income was around 1.8 percentage points of GDP greater than the OECD weighted average. One third (0.6 percentage points) of this difference is explained by the taxation of superannuation fund income in Australia. Taxes on superannuation fund income also played a significant role in the increase in income taxation paid by enterprises in the period between 1999-2000 and 2004-05, accounting for over one quarter of the total growth.

This extra dimension of income taxation imposed in Australia may well have adverse impacts on overall savings rates in Australia and needs to be examined closely in any reconsideration of the role of income taxation in Australia's tax mix.

### Company Taxation

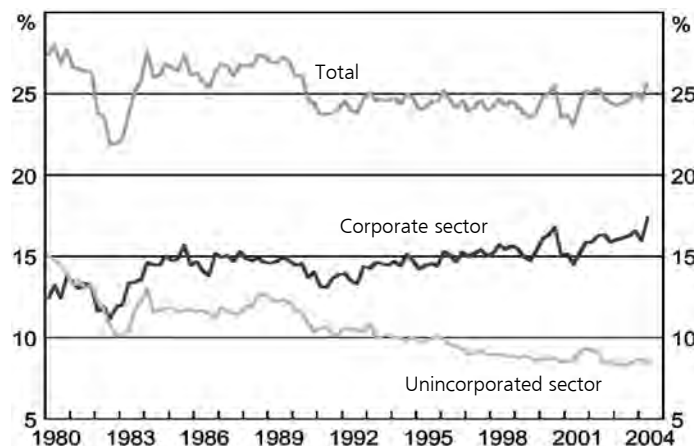
Company tax collections rose by 0.6 percentage points of GDP between 1999-2000 and 2004-05. Not all of this can be attributed to the New Tax System reforms.

The profit share of GDP has continued its gradual rise over recent years under the twin influences of the long boom and the imputation system. This has occurred alongside a slower decline in the share of profits accounted for by the unincorporated sector. As shown in Chart 8, between 1999 and 2004 the share of Gross Operating Surplus attributable to the incorporated sector rose from around 15 percent to around 17 percent of GDP.<sup>34</sup>

The increase in the share of company income in GDP is clearly a substantial factor in the increased proportion of company taxation in GDP. This increased share immediately raises the question of why personal income tax collections as a share of GDP have held up so strongly. Part of the explanation must be that distributed profits often attract further tax at the personal level. The steady influence of fiscal drag, which exerts its sway over personal income tax collections but not company tax collections, is a further factor.

In addition to the increase in the share of company income in GDP, the company tax base was broadened considerably as a result of the New Tax System changes. The 2004-05 Budget Papers note that measured tax expenditures are set to fall from around 4.5 percent to 3.5 percent of GDP between 2000-01 and 2007-08. This decline is due largely to the base-broadening measures introduced as part of the New Business Tax System.<sup>35</sup>

**Chart 8: Gross Operating Surplus 1980 to 2004 (% of GDP)  
Total, Corporate and Unincorporated Sectors**



Source: Reserve Bank of Australia, see [www.rba.gov.au](http://www.rba.gov.au)

With a revenue-neutral set of reforms the reduction in the statutory tax rate would have offset the base-broadening measures with no change in the effective tax rate. According to the 2004-05 Budget Papers, however, the effective tax rate (measured as the ratio of tax paid to a measure of the corporate income tax base) rose by around 12.5 percent between 1999-00 and 2004-05.<sup>36</sup> The Budget Papers attribute this 'small increase' partly to the increased level of capital gains tax and the decline in claims for prior year losses as a result of a relatively long period of strong profits. Beyond these factors the Budget Papers claim that the effective corporate tax 'has not moved markedly beyond its normal cyclical variation'.<sup>37</sup>

This conclusion should be treated with some caution, particularly as the removal of capital gains tax concessions available to companies (and therefore also part of the increase in capital gains tax paid by companies) should be included in an assessment of the revenue impacts of the New Business Tax System. Nevertheless, the argument presented in the Budget Papers does suggest that the major share of the strong growth of company tax collections since 1999-2000 is due more to the rise in the profit share of the incorporated sector than to any structural lift in the effective tax rate.

On the evidence available to date, therefore, there is a suggestion that the New Tax System has increased the effective rate of company taxation (and was therefore revenue enhancing). A more definitive evaluation of this suggestion will probably require several more years of data.

These facts do not imply the New Tax System reforms should be dismissed lightly. Shoring up the consumption tax base was a major achievement (and one that took over a quarter of a century of debate and that occurred in the face of strong resistance). There is every reason to think that the New Tax System reforms were at least as important in a structural sense as the income tax base broadening reforms of the 1980s.

What is clear, however, is that there remains considerable scope for further improvement to the structure of Australian taxation. The central focus of further improvements should be directed towards the entrenched over-reliance on income taxation.

## APPENDIX A: DISCUSSION OF OECD REVENUE STATISTICS<sup>38</sup>

To some extent international comparison of taxation is matter of apples and oranges. The OECD notes that ‘proper comparisons require detailed analysis of the nature of countries tax systems’.<sup>39</sup> The data should be regarded somewhat tentatively and the discussion in the present paper, like any involving this data, must also be treated cautiously.

While not the only limitations, two of particular relevance to Australia are discussed in this Appendix. These are the treatment of social security contributions and tax-like charges and refundable tax credits.

### **Social security contributions, Australia’s Superannuation Guarantee Charge and other tax-like charges**

Taxes are defined by the OECD as ‘compulsory unrequited payments to general government.’ ‘Unrequited’ in this context means that benefits available to taxpayers are not normally in proportion to contributions.<sup>40</sup>

Compulsory social security contributions are generally included in the OECD revenue statistics. There is some hesitation surrounding this and separate summary tables excluding these contributions are also presented.

Australia, along with New Zealand, does not levy social security contributions. Whether it is more appropriate to compare countries with or without the social security contributions is something of a thorny issue.<sup>41</sup> In 2002, social security contributions for OECD countries averaged (unweighted basis) of 9.3% of GDP and 25.4% of total taxation.<sup>42</sup>

In the present paper, the contributions are included because, to a large extent, Australia funds its social security entitlements from general revenue.

The picture is clouded further by the fact that the Australian Superannuation Guarantee Charge (levied at 9% on a payroll tax base and paid by employers) is not included as a tax and therefore not reflected in the OECD revenue statistics. Although compulsory, the SGC is not paid to general government revenue and benefits available to taxpayers are related to contributions.

Neil Warren includes the SGC in total taxation and calculates the SGC at 11.4% of all taxation revenue in 2001. This translates to 3.8% of GDP. If the SGC is included Australia’s level of taxation in 2001 would have been 33.9% of GDP instead of 30.1%. If the 3.8% level remained constant in 2002, the ratio of taxation to GDP would have been 35.3%.

As the comparisons in the present paper do not include the SGC they can be seen as understating the level of Australian taxation. They are left out of the comparisons to avoid this issue clouding the major lines of argument presented. If included they would strengthen those arguments.

Similar complications arise in relation to workers compensation premiums. In Australia, these are not paid into general government revenue and therefore are not treated as taxes. Some of the OECD countries appear to include premiums for workers injury insurance as part of their social security contributions.

Clearly tax-like charges are relevant to a broader consideration of cost competitiveness and, when equivalent charges are treated as taxes in some jurisdictions, they are also relevant to international comparisons of levels of taxation. The focus on taxation and, in particular, the use of the OECD definition of taxes limits the comprehensiveness of comparisons such as undertaken in this paper.

### **Refundable tax credits**

In the OECD revenue statistics, refundable (‘non-wastable’) tax credits are partially included in net revenue data. The proportion used to reduce or eliminate a taxpayer’s tax liability (the ‘tax expenditure component’) is included while any additional amount paid to the taxpayer is regarded as a direct expenditure item and is not reflected in the net taxation figures.<sup>43</sup>

Two countries with the same level of gross taxation and benefits but with different means of delivering these benefits (one as direct expenditures and one as tax expenditures) would report different net levels of taxation. The country using refundable tax credits would appear to be lower taxing.

For the eleven OECD countries that use refundable tax credits, the net tax data can understate the impact of the tax system. In Australia's case, including the tax expenditure component of refundable tax credits raises Australia's tax to GDP ratio in 2001 by less than half a percentage point. This is a similar proportion to that of the United States, New Zealand, Canada, France, the United Kingdom and Austria. Germany where non-wasting tax credits equated to 1.5% of GDP in 2001, is something of an exception.

The present paper does not adjust for the treatment of refundable tax credits because of the complexities and incomplete data involved.

While this appears to be a relatively minor issue, its importance is set to grow as far as Australia is concerned. Among Australia's refundable credits are the rapidly expanding Family Tax Benefit and the 30% private health insurance rebate.<sup>44</sup>



## APPENDIX B: WEIGHTED AVERAGES BASED ON GROSS DOMESTIC PRODUCT

### General approach

Calculation of the weighted averages for OECD countries is based on the OECD data on tax revenue for each country in US dollars and proportions of revenue in GDP.<sup>45</sup>

The weighted average proportion of taxation to GDP ( $W_{\text{OECD}}$ ) is calculated as:

$A_i$	=	Proportion of revenue to GDP for each country
$B_i$	=	Tax revenue in US dollars for each country
$GDP_i$ (in \$US)	=	$B_i / A_i$
$GDP_{\text{OECD}}$ (in \$US)	=	$GDP_1 + GDP_2 + \dots + GDP_n$
$C_i$	=	$GDP_i / GDP_{\text{OECD}}$ (GDP Weights)
$W_{\text{OECD}}$	=	$(A_1 \times C_1) + (A_2 \times C_2) + \dots + (A_n \times C_n)$

This general approach is used to calculate all the weighted averages of tax revenues expressed as a proportion of GDP.

The weighted averages for each of the sub-groups are calculated with reference to the total GDP of the members of the sub group. The USA, for example, has a GDP weight of approximately 39.5% for the OECD as a whole and 88.2% in the OECD Americas sub group.

The GDP weights ( $C_i$ ) used in all of the calculations are shown in Table B.1.

### A caveat to this method

This approach is sensitive to the exchange rate used in the conversion of national taxation collections levels into United States dollars.<sup>46</sup> This limitation implies that the weighted averages calculated on this basis need to be regarded with some caution.

The present paper perseveres with this approach to the weighted averages and the results should be seen as indicative rather than definitive. Nevertheless, as a correction to the limitations of the use of unweighted averages discussed at the outset of this paper, the weighted averages employed here retain clear advantages.

**TABLE B.1: GDP Weights used in Calculation of Weighted Averages**

**OECD Countries and OECD Sub Groups (2002)**

	<i>Total OECD</i>	<i>OECD Americas</i>	<i>OECD Pacific</i>	<i>OECD Europe</i>
<i>Canada</i>	0.0284	0.0635		
<i>Mexico</i>	0.0244	0.0546		
<i>United States</i>	0.3946	0.8818		
<i>Australia</i>	0.0155		0.0822	
<i>Japan</i>	0.1499		0.7960	
<i>Korea</i>	0.0207		0.1097	
<i>New Zealand</i>	0.0023		0.0121	
<i>Austria</i>	0.0078			0.0213
<i>Belgium</i>	0.0092			0.0253
<i>Czech Republic</i>	0.0026			0.0072
<i>Denmark</i>	0.0065			0.0179
<i>Finland</i>	0.0050			0.0136
<i>France</i>	0.0543			0.1491
<i>Germany</i>	0.0750			0.2059
<i>Greece</i>	0.0050			0.0138
<i>Hungary</i>	0.0024			0.0067
<i>Iceland</i>	0.0003			0.0009
<i>Ireland</i>	0.0046			0.0126
<i>Italy</i>	0.0448			0.1229
<i>Luxembourg</i>	0.0008			0.0022
<i>Netherlands</i>	0.0158			0.0434
<i>Norway</i>	0.0072			0.0198
<i>Poland</i>	0.0072			0.0198
<i>Portugal</i>	0.0046			0.0127
<i>Slovak Republic</i>	0.0009			0.0025
<i>Spain</i>	0.0247			0.0679
<i>Sweden</i>	0.0091			0.0250
<i>Switzerland</i>	0.0104			0.0284
<i>Turkey</i>	0.0070			0.0191
<i>United Kingdom</i>	0.0590			0.1619
<b>TOTAL</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

Table B.2 summarises the OECD data sources used in the calculation of the weighted averages. For averages relating to the composition of taxation, the OECD compositional data are used in conjunction with the attribution of social security contributions discussed in Appendix D.

**Table B.2: OECD Data Sources used in Calculating Weighted Averages**

<i>Total tax as a percentage of GDP</i>	Table 3	pp.67-8.
<i>Tax revenue of main headings as percentage of GDP</i>	Table 6	p.70.
<i>Taxes on personal income as percentage of GDP</i>	Table 10	p.72.
<i>Taxes on corporate income as percentage of GDP</i>	Table 12	p.73.
<i>Social security contributions as percentage of GDP</i>	Table 14	p.74.
<i>Total tax revenue in millions of US dollars</i>	Table 32	p.83.
<i>Exchange rates used, national currency per US dollar</i>	Table 37	p.85.

All references to OECD, 2004.

### APPENDIX C: WEIGHTED AVERAGES BASED ON THE AUSTRALIAN TRADE WEIGHTED INDEX

The Reserve Bank of Australia frequently publishes a Trade Weighted Index (TWI). The composition of the TWI reflects Australia's two-way trade with its major trading partners. The TWI data used are those published on 30 September 2002 to align with the 2002 year tax data used in the present paper (2002-03 for Australia).

**Table C.1: Weights Used in the Calculation Weighted Averages using the Trade Weighted Index Method**

	<i>TWI Weights (%)</i>	<i>All OECD Countries</i>	<i>OECD Americas</i>	<i>OECD Pacific</i>	<i>OECD Europe</i>
<i>Japan</i>	17.21	0.2647		0.5872	
<i>United States</i>	15.07	0.2318	0.9077		
<i>Euro area</i>	12.40	0.1907			0.6491
<i>China</i>	8.58				
<i>South Korea</i>	6.56	0.1009		0.2238	
<i>New Zealand</i>	5.57	0.0857		0.1901	
<i>United Kingdom</i>	5.14	0.0790			0.2689
<i>Singapore</i>	4.01				
<i>Taiwan</i>	3.59				
<i>Indonesia</i>	3.24				
<i>Malaysia</i>	2.87				
<i>Hong Kong</i>	2.44				
<i>Thailand</i>	2.34				
<i>Saudi Arabia</i>	1.63				
<i>Canada</i>	1.57	0.0242	0.0948		
<i>India</i>	1.53				
<i>Vietnam</i>	1.06				
<i>South Africa</i>	1.00				
<i>Papua New Guinea</i>	0.96				
<i>United Arab Emirates</i>	0.89				
<i>Philippines</i>	0.85				
<i>Sweden</i>	0.83	0.0128			0.0435
<i>Switzerland</i>	0.69	0.0106			0.0360
<i>TOTAL</i>	100	1	1	1	1

Source: Reserve Bank of Australia, 2002, 'Trade Weighted Index', Media Release 2002-19, 30 September 2002.

Using these weights, the TWI-basis weighted averages are calculated in the same way as the GDP weighted averages described in Appendix B.

## APPENDIX D: ALLOCATION OF SOCIAL SECURITY CONTRIBUTIONS BETWEEN THE INCOME AND PAYROLL TAX BASES

Because of their unique features, the OECD treats the social security contributions levied in most member countries as a separate tax category. This is done because social security contributions are related to taxpayers' future contingent benefits and therefore similar in some regards to Australia's Superannuation Guarantee Charge (see Appendix A).

While social security contributions are treated as a separate category of taxation by the OECD, they are levied on a combination of payroll and income tax bases and for comparative purposes can be allocated to these bases.<sup>47</sup> This paper follows the OECD methodology in the allocation of these taxes.

The difference between these two bases is that, regardless of whether the tax is levied on an employer or an employee, payroll taxes are those taxes levied on a gross earnings (or gross remuneration) basis and would usually be allowable as a deduction in determining taxable income. Income taxes on the other hand, are levied on net income after deductions and exemptions.

For most countries, including all the large countries, the allocation is readily available from the detailed Country Tables.<sup>48</sup> The social security contributions levied on a payroll tax basis are categories 2110; 2210; 2310 and 2410 in the Country Tables. The income tax base is recorded in the categories 2120; 2220; 2320 and 2420.

However, for some countries—notably the Central and Eastern European countries—either no breakdown or only a partial breakdown is available and for the purposes of this paper, the social security contributions are allocated in the same proportions as the averages for the countries for which breakdowns are available.

This element of the allocation is subject to error. However, the relatively small size of the countries involved implies only a small impact on the weighted average calculations.

**Table D.1: Allocation of Social Security Contributions between Income and Payroll Tax Bases (2002)**

	<i>Social Security Contributions</i>	<i>Taxes on Payroll</i>	<i>Taxes on Income (all on personal income)</i>
	<i>Proportion of GDP (%)</i>		
<i>Canada</i>	5.20	5.13	0.07
<i>Mexico</i>	3.20	3.20	0.00
<i>United States</i>	6.90	6.90	0.00
<i>Australia</i>			
<i>Japan</i>	9.90	9.90	0.00
<i>Korea</i>	4.60	4.60	0.00
<i>New Zealand</i>			
<i>Austria</i>	14.70	14.70	0.00
<i>Belgium</i>	14.70	14.70	0.00
<i>Czech Republic</i>	17.40	17.40	0.00
<i>Denmark</i>	1.70	1.63	0.07
<i>Finland</i>	12.20	11.44	0.76
<i>France</i>	16.30	16.30	0.00
<i>Germany</i>	14.50	14.50	0.00
<i>Greece</i>	11.80	11.32	0.48
<i>Hungary</i>	11.60	11.46	0.14
<i>Iceland</i>	3.10	3.09	0.01
<i>Ireland</i>	4.30	4.30	0.00
<i>Italy</i>	12.50	12.50	0.00
<i>Luxembourg</i>	11.20	11.20	0.00
<i>Netherlands</i>	13.90	6.20	7.70
<i>Norway</i>	9.90	9.90	0.00
<i>Poland</i>	9.50	9.23	0.27
<i>Portugal</i>	9.20	8.94	0.26
<i>Slovak Republic</i>	14.30	14.30	0.00
<i>Spain</i>	12.60	12.60	0.00
<i>Sweden</i>	15.10	15.10	0.00
<i>Switzerland</i>	7.80	7.80	0.00
<i>Turkey</i>	6.10	6.10	0.00
<i>United Kingdom</i>	6.10	6.10	0.00

Sources: Social security contributions as a proportion of GDP, OECD, 2004, p.70; other data derived from Country Tables OECD, 2004, pp.103-188.

## Endnotes

- <sup>1</sup> Jennifer Buckingham, *State of the Nation* CIS, April 2004, page 97
- <sup>2</sup> Michael Keating, 'The case for increased taxation', Academy of the Social Sciences Policy Paper 1 (2004), p.6
- <sup>3</sup> I am grateful for the suggestions of Peter Saunders and of anonymous referees. Geoff Carmody of Access Economics also offered helpful guidance. Responsibility for the remaining shortcomings remains with the author. This paper develops themes explored previously in P. Burn and S. Munchenberg, 'Taxation and regulation in an open economy' in R. Maddock, and P. Duncan, (eds) *Aspire Australia, Business Council of Australia* (2002) and in Australian Industry Group, *How Competitive is Australia?* (2003).
- <sup>4</sup> Australia's Superannuation Guarantee Charge is not included as a tax in the OECD statistics. See Appendix A for a discussion of this exclusion and of the inclusion of the social security contributions of OECD countries in the comparative data.
- <sup>5</sup> Reserve Bank of Australia, 'Trade Weighted Index', Media Release 2002-19 (30 September 2002).
- <sup>6</sup> Population grew from around 11.4 million in 1965 to around 19.9 million in June 2003.
- <sup>7</sup> M. Keating, 'The Case for Increased Taxation', p.5.
- <sup>8</sup> ACTU, *A Fair Australia- Tax Background Paper*, Background Papers (ACTU Congress 2003).
- <sup>9</sup> ACOSS, *Taxation in Australia: home truths and international comparisons*, ACOSS Info347 (Sydney: June 2003).
- <sup>10</sup> Keating, 'The Case for Increased Taxation', p.6.
- <sup>11</sup> See also Neil Warren, *Tax: Facts, Fiction and Reform*, Research Study No.41 (Sydney: Australian Tax Research Foundation, 2004), pp. 50-54.
- <sup>12</sup> To some extent the changes in the unweighted averages over time reflect compositional differences as countries such as Korea, Mexico and the Slovak Republic have joined the OECD. Nevertheless, the five non-European countries who were OECD members in 1965 (Canada, the United States, New Zealand, Australia and Japan) have ranked among the lower taxing OECD countries throughout the past forty odd years.
- <sup>13</sup> The five largest OECD countries account for over two thirds of the total GDP of all OECD countries. These are the US (39.4%); Japan (15%); Germany (7.5%); the UK (5.9%) and France (5.4%).
- <sup>14</sup> Making this comparison of Australia's level of taxation over several years with average taxation levels in the 2001 year is legitimate given the overall stability of the averages over the period concerned. For instance the unweighted average of all OECD countries ranged between 36.3% and 37.2% over the 1996-2002 period. See Organisation for Economic Cooperation and Development (OECD), *Revenue Statistics, 1965-2002* (Paris: 2003), p. 20 for an illuminating discussion of this period of stability.
- <sup>15</sup> It is sometimes suggested that, when countries are running budget deficits, the higher level of future taxes implied by the accumulation of debt could be taken into account (see for example, Warren, *Tax: Facts, Fiction and Reform*, p. 54). It is, however, the current level and structure of taxation that is relevant to cost-competitiveness. In any case, deficits do not necessarily or even generally, imply higher future taxes as a proportion of GDP. Debt can be repaid with the proceeds of asset sales; its real level erodes with inflation and it can imply increased productive capacity (if invested in GDP-boosting transport infrastructure for example). Other things being equal, a lower level of debt would imply a lesser need for taxation in line with lower debt servicing costs. Countries such as Australia, with very low public sector debt levels could be expected to have lower levels of taxation than high debt countries.
- <sup>16</sup> The Euro area is treated as a single trading partner in the Trade Weighted Index and in 2002, ranked as our third highest trading partner both among OECD countries and in the overall TWI. China, a non-OECD country, was Australia's fourth largest trading partner overall (counting the Euro area as a single trading partner).
- <sup>17</sup> New Zealand, which accounts for around 5.6% of Australian trade (its sixth largest trading partner in 2001) and with total tax to GDP ratio of 34.9%, is something of an exception.
- <sup>18</sup> P. Whiteford, and G. Angenent, *The Australian System of Social Protection — An Overview*, Occasional Paper No. 6 (Canberra: Department of Family and Community Services, 2001), p.50.
- <sup>19</sup> See the discussion in Whiteford and Angenent, *The Australian System of Social Protection*, pp.45-51.
- <sup>20</sup> J. Hassler, and P. Mats, 'The international mobility of tax bases: an introduction', *Swedish Economic Policy Review* 9 (2002), pp.3-8.
- <sup>21</sup> See Organisation for Economic Cooperation and Development (OECD), 2004, *Revenue Statistics, 1965-2003* (Paris: 2004), pp.280-281 and the discussion in Appendix D.
- <sup>22</sup> See the discussion in B. Genser, *Corporate Income Taxation in the European Union: Current State and Perspectives*, Working Paper No.17 (Canberra: Centre for Tax System Integrity, 2001). There does not seem to be any clear relationship between the degree of relief from double taxation and the level of taxation on corporate income among OECD countries. There is some evidence to suggest that countries

with imputation or dividend exemption systems tend to have higher shares of corporate taxes in total income tax. There is significant variation away from this tendency however suggesting that a range of factors may be at work in determining the share of income tax collected at the individual and corporate levels.

- <sup>23</sup> This is complicated for direct investment in non-Australian multinationals when Australian income tax is recognised and credited against other global tax liabilities.
- <sup>24</sup> This is particularly the case when credit for foreign tax paid is washed out on distribution to domestic shareholders of Australian multinationals.
- <sup>25</sup> B. Genser, *Corporate Income Taxation in the European Union: Current State and Perspectives*, p.2, 6.
- <sup>26</sup> NSW, while in advance of other States in relation to some areas of taxation reform (notably the early removal of Bank Accounts Debits tax; a restructure of land taxation and the reduction in stamp duty rates on insurance duties), has recently dented its record with the introduction of a new stamp duty the Vendor Transfer Duty.
- <sup>27</sup> The data relating to changes in taxation collections between 1998-99 and 2002-03 may be sensitive to any peculiarities in either of these years. This is another reason for treating the discussion in this section as tentative.
- <sup>28</sup> The 2000-01 reductions partially offset the accumulated impacts of fiscal drag since the previous income tax reductions several years earlier. Although not reflected in Chart 6 below, subsequent adjustments were introduced in 2003-04. In the 2004-05 budget increases in family tax benefits and the higher tax thresholds further offset the impacts of fiscal drag.
- <sup>29</sup> This was a rise from around 15.5% to around 17.5% of a measure of the company tax base. See Commonwealth of Australia, *2004-05 Budget Paper No.1* (Canberra: 2004), p.5-11, Chart 2.
- <sup>30</sup> The net impacts of the restructured capital gains concessions are complex because of the impacts of changed regime on the timing of realisations and because the indexation method was 'grandfathered' for assets acquired prior to the introduction of the new system. Taxpayers could opt for the method that resulted in the lower tax liability. While this on its own would have tended to reduce tax collected on any given transaction, the removal of averaging was not 'grandfathered'. The removal of averaging would tend to encourage taxpayers to hold assets whereas the option to choose between the 50% discount method and indexation would reduce barriers to realisation on average.
- <sup>31</sup> Australian Bureau of Statistics (ABS), *Taxation Revenue, Australia*, Cat. No. 5509.0, (Canberra: 2004). The fall in recorded FBT collections in 2002-03 was due to a revised treatment of receivables relating to employee benefit arrangements.
- <sup>32</sup> Part of this decline reflected reductions in pre-existing arrangements to offset the impacts of the GST.
- <sup>33</sup> The growth of consumption taxation in the period examined here may also reflect a degree of debt-financed tax base growth. Further growth from this source is limited and, particularly if household budgets adjust to reflect slower rates of asset-price growth and the risk of higher interest rates, the current levels of consumption tax collections may prove to be something of a peak.
- <sup>34</sup> The reduction in the company tax rate and the introduction of fully refundable imputation credits may have increased the incentive to incorporate and contributed to the increase in the share of company profits in total profits. The new capital gains tax concessions available to small business may also have added to this incentive. Against this, however, the general increase in the taxation of gains on capital assets realised by companies would have reduced the incentive to incorporate (although the previous benefits of indexation of capital gains realised by companies were washed out on distribution). The decline in the share of profits attributable to the unincorporated sector since 1999 continues a similar decline evident since the late 1980s. This points suggest that factors other than the New Tax System continued to exert their influence in the years since 1999.
- <sup>35</sup> Commonwealth of Australia, *2004-05 Budget Paper No.1*, p.5-33.
- <sup>36</sup> An increase from around 15.5% to around 17.5% of a measure of the company tax base (Commonwealth of Australia, *2004-05 Budget Paper No.1*, p.5-11, Chart 2).
- <sup>37</sup> Commonwealth of Australia, *2004-05 Budget Paper No.1*, p.5-11. This claim is not quantified. The Budget Papers also put forward a number of other factors in explanation of the growth of company tax collections. These relate to the growth of the profit share discussed above and not the increase in the effective rate of tax on company income.
- <sup>38</sup> This section benefited from discussions with Geoff Carmody of Access Economics. See also Warren, *Tax: Facts, Fiction and Reform*, pp.50-54.
- <sup>39</sup> OECD, *Revenue Statistics, 1965-2002*, p.34.
- <sup>40</sup> OECD, *Revenue Statistics, 1965-2003*, p.17.
- <sup>41</sup> Warren, *Tax: Facts, Fiction and Reform*, p.52.
- <sup>42</sup> OECD, *Revenue Statistics, 1965-2003*, p.74.

<sup>43</sup> OECD, *Revenue Statistics, 1965-2002*, pp.22-24.

<sup>44</sup> OECD, *Revenue Statistics, 1965-2003*, p.105.

<sup>45</sup> Data sources for the calculation of weighted average are summarised in Table B.2 below.

<sup>46</sup> These exchange rates are provided in OECD, 2004, p.85.

<sup>47</sup> OECD, *Revenue Statistics, 1965-2003*, p.279.

<sup>48</sup> As above, pp.103-188.

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## About the Author

**Dr Peter Burn** is a National Senior Advisor, Economics and Industry Policy, at the Australian Industry Group. He was previously Director, Policy at the Business Council of Australia and was Secretary to the Business Coalition for Tax Reform during the period of the New Tax System reforms. Peter has held academic positions at the University of Queensland and the University of Newcastle. He has also worked in the Tax Policy Division of the Department of the Treasury. He graduated with a First Class Honours degree in Economics from the University of New England and holds a PhD from the University of New South Wales.

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PO Box 92, St Leonards, NSW 1590 Australia • p: +61 2 9438 4377 f: +61 2 9439 7310 e: [cis@cis.org.au](mailto:cis@cis.org.au)

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