Chapter 1

Introduction and methodology

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1. INTRODUCTION AND METHODOLOGY

1.1 BROAD CONTEXT

The comparison of countries' taxation regimes is a challenging task, and caution is advised when making even simple comparisons between countries, as there are many factors which affect the reliability of any comparison.

While there may be challenges in making robust comparisons between countries for either tax burdens in aggregate, or in relation to specific tax bases, the value and reliability of these comparisons is significantly enhanced when a comparison is made between similar industrialised countries.

It is unlikely any other country's tax system would provide Australia with a better 'off-the-shelf' model for its tax system. Each country's tax system reflects the interplay of numerous economic, social, political, cultural and historical factors that may not be relevant to the design of Australia's tax system.

More specifically, key differences in tax systems between individual countries can be driven by variations in social structures and the values and expectations of its citizens — particularly with respect to equity or fairness, the degree of development of the economy, the extent to which the economy is integrated into the world economy, and differences in delivery mechanisms for achieving social policy objectives.

The aim of this report is to provide reliable information on the taxation arrangements applying in Australia and other countries. The hope is that this will highlight the important features of Australia's taxation arrangements and help inform discussion about Australia's tax system.

This study has been an opportunity to report on a broad range of policy settings from around the world. In doing so, a large amount of information was collected, synthesised and analysed. International trends have been highlighted where relevant, but no policy recommendations have been made with respect to Australia's tax system.

1.2 TERMS OF REFERENCE

The Treasurer commissioned this study to examine and report on how Australia's tax system compares with other developed economies.

The aim of the study was to provide a public report containing objective, descriptive information that compares Australian taxes to those in other countries. The task of the study was to:

- provide information on the overall level of taxes, the tax mix, and the base and rates within each type of tax;

- cover taxes collected at national, state and local government levels including personal, business, indirect, property, transaction and superannuation taxes; and
- make comparisons with all OECD countries, largely reflecting the availability of comprehensive and comparable information on their tax systems.

The study was given the latitude to extend beyond the 30 OECD countries if comparable information was readily available, and if issues relevant to the study would benefit from a broader analysis.

1.3 Choosing the selected countries for the report

A threshold issue for this study was the comparator set of countries to be used. Where possible, a full comparison is provided with other advanced economies, as represented by the membership of the OECD. When all 30 or nearly all 30 member countries are included in a comparison, the shortened form used is OECD-30. In places, comparisons are also drawn with other developed and developing countries in our region.

In other places, particularly in respect of the reporting of detailed tax design features, it was not possible for this study to cover all of these countries, so a sub-set of comparator countries was selected. This section explains the selection process.

1.3.1 Alternative rationales

The choice of countries to be compared in any particular study will primarily depend upon the objectives of the study:

- Where the purpose of an investigation is to explore a broad range of tax settings from around the world, the choice of countries to be examined may primarily be governed by an objective of maximising diversity.
- In the case of the taxation of highly mobile factors of production, comparator countries may be selected on the basis of their relevance to the home country's capital flows (or flows of skilled labour), either as sources of capital (or skilled labour) or competitors for capital (or skilled labour).
- Where the purpose is to compare taxation arrangements against countries that have a close economic connection with Australia, the choice of countries may be determined by investment and trade links.
- Where the purpose is to investigate alternative settings for specific taxation parameters, or to benchmark existing parameters against those in other countries, the choice of country may be driven by similarity.

Regardless of the nature of any particular study, the social and institutional context of the tax system in each comparison country will be relevant in relating any findings back to the home country. The revenue requirements of the tax system will be determined, to varying extents, by the service and income redistribution functions of the government.

Societies' preferences may also bear directly on the design of the tax system by, for example, being reflected in the progressivity of the personal income tax system and the relative importance of different tax bases. Comparisons between countries in which the role of the public sector is significantly different may not be particularly informative, especially where the key purpose of the comparison is to benchmark tax settings against those in other countries.

1.3.2 Choosing the OECD-10 comparator countries

As noted earlier, comparisons of countries' taxation regimes should primarily be guided by the nature of the study. However, as a general benchmark, there is merit in comparing Australia's tax settings with those in countries that are broadly similar in terms of their overall tax burden and the role of the government sector in the economy. This is likely to be particularly relevant when comparing personal income tax settings, given the relative importance of individual taxation in the revenue base of most countries.

The proportions of revenue and expenditure to GDP are useful measures for identifying comparison countries. The revenue ratio is useful in identifying countries with tax systems designed to deliver broadly equivalent levels of revenue. The ratio of expenditure to GDP is a broad indicator for the size and role of government in the economy. There is no simple test for selecting countries using these ratios. The threshold for selecting comparator countries for this study was a pragmatic one, aimed at achieving a balance between the degree of conformity and a sufficiently large sample of countries to provide meaningful comparisons without overloading the study with excessive information.

Table 1.1 shows average revenue and expenditure ratios for a range of OECD countries for the four-year period 2000-2004. The eight highlighted countries have an absolute difference on revenue and expenditure of less than six percentage points, compared to Australia.

Table 1.1: Revenue and expenditure as a proportion of GDP[(a)]
Difference compared with Australia, averages for 2000-2004

	Revenue	Expenditure
Austria	13.0	14.4
Belgium	12.5	12.6
Canada	5.2	4.7
Czech Republic	3.4	10.1
Denmark	19.2	18.5
Finland	17.2	13.4
France	13.0	16.2
Germany	7.9	10.9
Greece	8.1	14.0
Hungary	7.5	13.3
Iceland	8.7	9.1
Ireland	-2.3	-3.3
Italy	9.2	12.2
Japan	-5.9	1.6
Korea	-6.4	-9.2
Luxembourg	8.4	6.0
Netherlands	7.9	9.4
New Zealand	4.4	1.2
Norway	20.8	9.7
Poland	4.8	8.8
Portugal	5.3	8.9
Slovak Republic	0.3	7.4
Spain	1.5	2.3
Sweden	22.7	21.4
Switzerland	-1.0	-0.7
United Kingdom	4.0	5.2
United States	-3.4	-0.5

(a) Data for Mexico and Turkey were not available.
Source: OECD *Economic Outlook* No. 78, 2005.

The Netherlands was chosen as the final comparator country. Of the countries with an absolute difference greater than six percentage points but less than ten percentage points (Iceland, Korea, Luxembourg, the Netherlands, Poland, Portugal and the Slovak Republic), the Netherlands and Korea have the closest economic connection with Australia. Of those seven countries:

- the Netherlands has the highest bilateral direct investment flow (inbound and outbound) with Australia and also has a similar size economy; and
- Korea has the highest bilateral trade flows with Australia.

On balance, the Netherlands was chosen partly because of its interesting approach to taxing capital income (taxing the imputed return).

This group of OECD countries is referred to throughout the report as the 'OECD-10' comparator group of countries. It consists of Australia, Canada, Ireland, Japan, the Netherlands, New Zealand, Spain, Switzerland, the United Kingdom and the United States.

The terminology is generally used even when data is not available on one or two countries (these exceptions are explained in the chapter or graph notes).

1.3.3 The selected Asian economies

Information on the tax burden and tax mix across ASEAN economies is included in this report. In addition, more detailed information was gathered on a smaller group of Asian economies. Singapore and Malaysia were chosen because they are members of ASEAN. Hong Kong (SAR) was chosen because along with Singapore it is often cited as being a competitor with Australia for regional headquarters, and because it is an important destination along with Singapore and Malaysia for skilled Australians moving overseas on a permanent or long-term basis. Taiwan was chosen, notwithstanding data limitations, because it is an important regional economy and is a significant trading partner with Australia.

1.4 THE REPORT METHODOLOGY

This report is a combination of:

- descriptive and statistical information on overseas and Australian taxation arrangements;
- analysis and observations based on that information;
- information and analysis drawn from the OECD and other sources of technical expertise; and
- economic principles applied to taxation issues where relevant.

The OECD provides unweighted averages for many data series. Where there are sufficient countries analysed in this report, weighted averages have also been calculated. For a description of weighted and unweighted averages refer to Box 3.1.

1.4.1 Information collection

A major task of the study was to collect descriptive information about the important characteristics of the tax systems of the selected countries.

This report is based on a mixture of publicly available data and information sourced by the Australian Treasury from particular countries, and material in relation to business and personal tax rules in other countries sourced from four major tax advisory groups — Deloitte, Ernst & Young, KPMG and PricewaterhouseCoopers — as well as information from the Institute of Actuaries of Australia on the taxation of retirement savings. The four firms and the institute received no payment for the provision of this information.

Other sources of information about tax systems included:

- CCH Master Tax Guides for Australia, Canada, Hong Kong, Singapore, Malaysia, the United Kingdom, the United States, and New Zealand;
- International Bureau of Fiscal Documentation website;
- OECD Tax Database and OECD publications, including *Revenue Statistics* and *Taxing Wages*, and certain unpublished OECD studies (see references);
- various countries' revenue authority websites and governments' guides to their taxation systems;

- personal communications with OECD officials, taxation officials in other countries or with taxation experts; and
- various academic studies and published texts (see references sections for each chapter for a full list of information sources).

In some circumstances, for instance when comparing broad tax burdens where OECD information was available on all 30 OECD countries, the report has included that information. In other circumstances, where detailed taxation information needed to be collected, the report focused on the OECD-10 countries. The report has also included a discussion of some interesting features, such as the flat tax systems in Eastern Europe, of the taxation systems applying in countries including non-OECD countries.

In graphs data are generally shown in an ascending order.

The terms of reference requested the study to cover non-tax revenues where relevant and possible. Lack of comparable data limited the amount of analysis included in this report. Where total revenue is discussed in Chapter 2 and Chapter 12, it includes non-tax revenue.

1.4.2 Summary of methodology

The role of taxes in public finance

The public finance chapter includes the concepts of general government expenditure and revenue as a proportion of GDP. Taken together, these measures comprise the fiscal position of the general government sector. The fiscal balance is general government revenue less expenditure. The general government sector aggregates all levels of government for a country.

A statistical overview

The statistical comparison chapter focuses on the OECD-30. It presents the concept of taxation revenue as a proportion of GDP. This measure is the main indicator of tax burden used throughout the report. It is used in respect of aggregate tax burden and also for reporting the relative levels of tax burden for individual taxes.

Other measures that are used to inform the understanding of the tax burden are:

- tax per capita, which is total taxation revenue converted to Australian dollars using purchasing power parities and divided by population;
- effective tax rates, which is the revenue from a particular tax divided by a measure of the relevant tax base; and
- tax burden share by level of government.

Some of these concepts are also discussed in detail in respect of corporate taxation in Appendix 5.6.

A second concept presented in the chapter is that of tax mix. This measure refers to the composition of the tax burden — that is, the proportion of tax burden which is contributed by different types of taxes. In some cases the tax mix will be shown as components of the tax burdens of different countries, while in others it will be shown as a proportion of total revenue — that is, independent of the level of tax burden.

Wage and salary taxation

The wage and salary taxation chapter uses both aggregate measures and cameo analysis to provide an indication of Australia's personal tax burden. The most comprehensive measure used for the cameo analysis is the tax wedge, which takes into account personal income tax, employee and employer social security contributions, payroll taxes and cash benefits.

One of the issues in developing this chapter was the level of detail to provide on the tax wedge. Given the amount of information, summary results are is included in the chapter with more detailed charts and descriptions in the appendices.

The chapter includes a comparison of the top marginal tax rate and thresholds at which the top marginal tax rate is imposed for the OECD countries. The analysis was extended in Australia's case to take into consideration tax threshold changes due to take effect on 1 July 2006.

Measures of progressivity are also included in the analysis. These progressivity measures are based on an OECD methodology which calculates the change in the tax wedge for different income levels.

Corporate taxation

The corporate taxation chapter compares the corporate tax burden using several measures and notes the advantages and disadvantages of these measures. There is also a comparison of Australia's effective corporate tax rate (that is, tax paid as a proportion of the tax base) through time. Issues of data consistency prevented a wider comparison with effective tax rates for other countries.

The chapter also compares statutory corporate tax rates and bases, including historical changes, and draws further insights from the descriptive comparative tables on corporate tax rates, depreciation, losses, and key business tax concessions.

There is a comparison of effective tax rate measures for hypothetical investments, where those investments earn either a normal or a super-normal profit. A discussion of this effective tax rate methodology is provided in Appendix 5.6.

There is also a discussion of the taxation of corporate capital gains including a comparison of the corporate capital gains tax rate applying to the sale of a qualifying (substantial) shareholding.

Capital income taxation

The analysis of the taxation of capital income earned by individuals focuses on dividends, capital gains on shares and interest income. In most cases the analysis is based on OECD estimates of the top overall tax rate applying to capital income.

The first section covers the taxation of dividend income, which includes a discussion on systems for integrating the personal and corporate income tax systems. This is followed by a comparison of capital gains taxes on shares and the taxation of interest. The chapter concludes with a comparison of differences between personal and corporate income tax rates.

Retirement savings taxation

There are significant impediments to comparing the taxation of retirement savings across countries. There are no international sources of data isolating the taxation of retirement savings. Further, retirement income arrangements are broad and varied, and can include significant reliance on public provision — and, conversely, little reliance on private savings arrangements.

The chapter focuses on the taxation arrangements applying to private retirement savings. As retirement savings can be taxed at three points (on contributions, earnings and benefits), the chapter attempts to draw out measures of overall concessionality in the taxation of retirement savings.

Conclusions are drawn about the concessionality of arrangements within a country (compared to benchmark savings). A brief examination of revenue forgone is also explored. The results of the revenue forgone analysis underpin the conclusions about the relative internal concessionality of retirement savings taxation arrangements.

Finally, the limits imposed on the concessionality of retirement savings arrangements (both at contributions and benefits stages) are examined in a detailed table.

Taxation of goods and services

The goods and services taxes classification covers a broad range of taxes. When the aggregate information is broken down further, classification errors can arise. The chapter focuses on the broad classifications of general consumption taxes, and excise and customs duties combined.

Most of the analysis in this chapter is based around descriptive measurements of variations in tax rates and bases. Differences in the rate and base of general consumption taxes are explored and the rates of specific taxes levied on fuels are also compared.

The chapter also contains descriptive information on excise duty rates applied to alcohol and tobacco products. The diversity and complexity across countries in implementation and design of these duties make it difficult to determine Australia's relative ranking compared to other countries.

Property and transaction taxation

A wide variety of taxes fall into the property and transaction taxes category and there is considerable diversity between countries in the implementation and design of these taxes. This chapter discusses the relative ranking of Australia's property and transaction tax burden with the other OECD–10 countries over four sub–categories: taxes on immovable property; taxes on net wealth; estate, inheritance and gift taxes; and taxes on financial and capital transactions. Descriptive information on tax rates and bases is included for a selection of taxes that fall under these categories.

International taxation arrangements

The chapter explains that a country's international taxation arrangements are generally modifications to its domestic income tax system where cross–border investments and transactions are involved. Typical areas in which modifications occur are compared across the OECD–10 including the way in which foreign source income and the income of non–residents is taxed. International tax integrity rules and tax treaties are also compared.

Taxation and labour and capital flows

The chapter examines briefly Australia's cross–border skilled labour and capital flows including in the context of tax. It also looks at the experience of Ireland and the emerging major markets of China and India.

Selected Asian economies

The Asian economies chapter faced some significant issues including data availability. Where data was available there were concerns about its quality. Unlike OECD countries, where a central body exists to issue direction about how taxes are to be classified and reported, much of the available data appears to be what the particular country has determined should be reported, which leads to inconsistencies. These inconsistencies make it difficult to draw conclusions about differences in their approaches to taxation.

Some simple charts of tax mix and tax to GDP ratios are provided, but the chapter focuses on detailed descriptive examinations of particular aspects of the taxation regimes in place in various Asian economies.

Administration and compliance costs of taxation

The chapter discusses operating costs and highlights some of the difficulties in making international comparisons. Because of the difficulties, no summary is made of the various studies that estimate operating costs across countries.

Tax expenditures

As a result of difficulties in comparing estimates of tax expenditure across countries, comparisons were not attempted. The chapter explains the role of tax expenditures as a policy instrument and provides a brief discussion of the advantages and disadvantages of using tax expenditures as opposed to direct expenditure.

This is followed by a discussion of the various approaches that can be used to measure tax expenditures, highlighting the limitations in making comparisons. The chapter concludes with a comparison of tax expenditure reporting across the OECD.

1.5 LIMITATIONS AND CAVEATS

The study had to confront numerous limitations, which make it necessary to provide several caveats. In each of the detailed chapters, where appropriate, there is a discussion of the limitations of the particular measures or methodologies used in that chapter.

1.5.1 General caveat and legal limitation

Background information for the report was collected to support the work of the co-authors of the study.

The information included is not designed to constitute the basis for commercial decisions by individuals as it does not take into account the circumstances of any particular case. Separate financial and legal advice should be obtained for decisions on any private commercial matters.

1.5.2 Up-to-date information

Although the study sought the most contemporary information available about the taxation arrangements in other countries, there may be instances where the information is not current at the time of the release of the report. The report also had to manage the differences in data availability across countries with some countries having more contemporary data than others. Given these circumstances, some comparisons are based on earlier data to provide a common benchmark across the comparator countries.

1.5.3 Measures and averages

The study had to assess the merits of using particular measures and whether to use weighted or unweighted averages. Weighted averages have only been included in respect of the whole 30 OECD countries, and not for the OECD-10 comparator countries. An overview of weighted or unweighted averages is provided in Box 3.1.

1.5.4 Differing definitions of income

The differing definitions of income in some countries create issues for international comparisons.

One contrast is between the United States and Anglophone countries outside the United States (that is, Australia, Canada, New Zealand and similar countries). In the latter, a distinction is drawn between the judicial concept 'income', often referred to as 'ordinary income', and capital receipts (including capital gains). By contrast, in the United States the judicial concept of income is broad and does not make any distinction between 'ordinary income' and 'capital gains' — income is synonymous with gain of any sort, including windfalls.

1.5.5 Broad legislation versus administrative practice

Even where countries' tax systems exhibit significant similarities at the broad design level, there may be differences in the detail of the law or its administration which make these similarities more apparent than real. Minor differences may create significant incentives to modify behaviour. A balance needs to be struck between the level of detail explored and the confidence that can be attributed to the accuracy of the comparisons.

1.5.6 Differing fiscal years

The fiscal year varies from country to country and this may have some effect on the comparisons. There is considerable variation in fiscal years among the OECD countries, for example:

- Australia — 1 July to 30 June;
- Canada — 1 April to 31 March;
- Ireland — calendar year;
- United Kingdom — 6 April to 5 April; and
- United States — 1 October to 30 September.

National authorities whose fiscal years do not match to the calendar year, provide data for OECD publications on a calendar year basis, where possible, to permit maximum comparability with the data of other countries.

There remain a few countries, including Australia, where data refer to fiscal years. For *Revenue Statistics 2005*, Australia provides 2003-04 data for the calendar year 2003.