

# International trends in company tax rates — implications for Australia's company income tax

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Worldwide statutory company tax rates have been declining. The choice of Australia's statutory company tax rate is a balancing act, as Australia's company income tax system has two basic roles. The first, to tax the income of Australian residents, is not affected directly by the international trend. The second, to tax the Australian source income of foreign investors, may be affected by that trend. Reducing Australia's company tax rate (to reduce tax on foreign investors) could, but may not, improve national welfare by increasing foreign investment in Australia. Australia's current statutory company tax rate is around the OECD average and is less than or equal to the rates in our major sources and destinations of foreign investment.

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## Introduction

A striking feature of recent decades is the marked decline in countries' statutory company tax rates. The OECD average top (federal) statutory company tax rate fell from 44 per cent in 1985 to 31 per cent in 2004, on a GDP-weighted basis.<sup>2</sup> Australia's statutory company tax rate fell even more, from 46 per cent to 30 per cent over the same period.

The decline in statutory company tax rates and other developments (such as the decline in cross-border withholding tax rates) raises concerns for some – optimism for others – that competition between countries to attract investment will limit countries' capacity to tax capital income.<sup>3</sup> Then, total tax revenue would decline or additional reliance would be placed on less mobile tax bases such as labour, consumption or land.<sup>4</sup>

This article briefly surveys international trends and outlines some of the policy considerations and empirical evidence relevant to determining an appropriate statutory company tax rate in light of those trends. It considers:

- international trends in statutory and (taking account of other features of the tax system) effective company tax rates and how Australia compares;
- two basic roles of company income tax – taxing the income of residents and (of primary interest here) taxing foreigners on their Australian source income;
- the pros and cons of reducing the tax foreigners pay on their Australian source income, including relevant empirical evidence; and
- observations on the implications of recent trends.

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2 Estimated using the OECD Tax Database; the GDP weights are based on nominal GDP of the OECD countries in US\$ at market exchange rates.

3 The appropriateness of capital income taxation is controversial, even for a closed economy. The benefits of a broader base and distributional outcomes must be measured against the efficiency costs of distorting saving and investment decisions. For an open economy, cross-border capital flows may make investment relatively more tax sensitive. This would argue for a lower rate of tax on capital income than other income from an efficiency perspective. See Zee (2002, pp. 1185-87) for a brief overview.

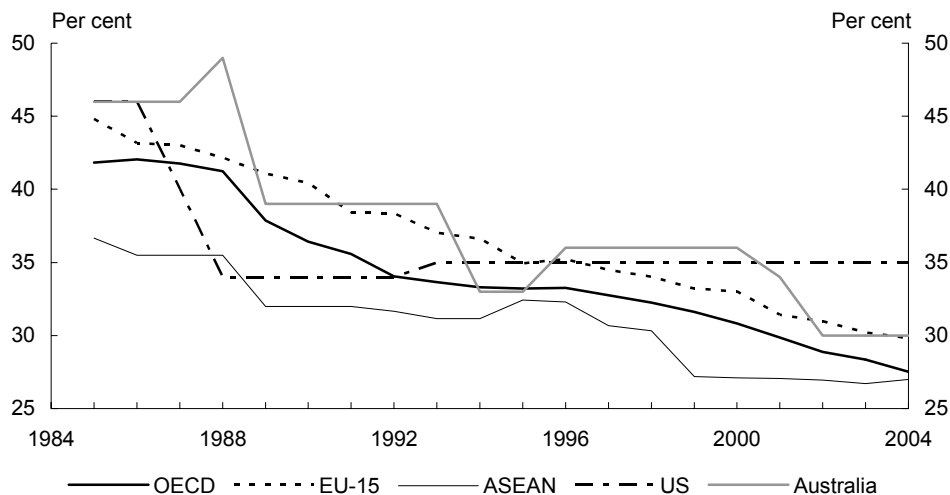
4 That is not to say that all these tax bases are immobile. The mobility of skilled labour and consumption has probably increased in recent decades.

## International trends and comparisons

### Trends in statutory company tax rates

Statutory company tax rates clearly have fallen, particularly in developed nations (Chart 1).

**Chart 1: Historical trends in statutory company tax rates<sup>(a)</sup>**



(a) Rates are top federal statutory company tax rates. Averages are unweighted.  
Source: OECD Tax Database; KPMG (various years).

Accompanying the decline has been a convergence of statutory company tax rates, with the average rates for the OECD, European Union, ASEAN and other less-developed countries moving closer together over time.

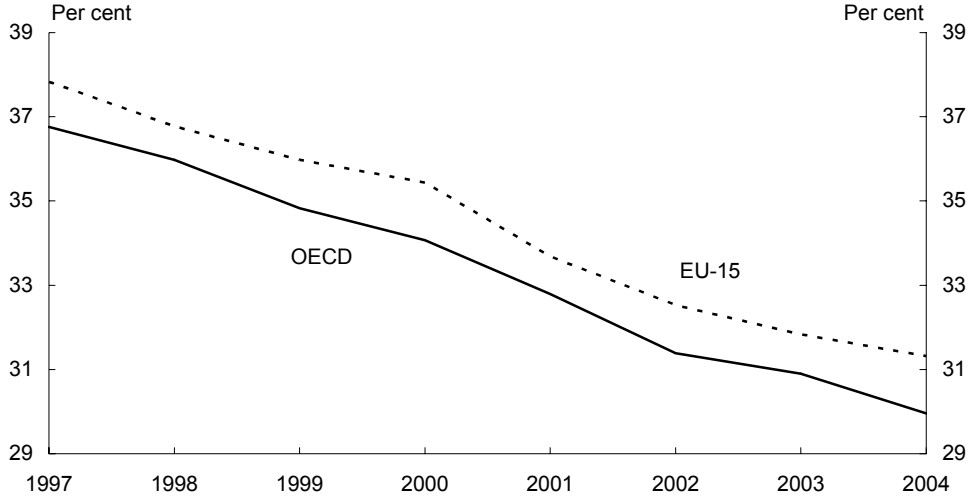
These movements in group averages can, however, hide significant differences within the various groupings or regions. For example, within the European Union rates range from 0 per cent on reinvested earnings (Estonia) to around 38 per cent (Germany).<sup>5</sup>

The rate of decline in recent years also appears relatively constant, if changes in the unweighted averages of OECD and European Union countries are a guide (Chart 2).

<sup>5</sup> Low statutory company tax rates adopted by many other small European Union economies (Ireland 12.5 per cent; Latvia, Lithuania and Cyprus 15 per cent; Poland and Slovakia 19 per cent) have led France and Germany to push (unsuccessfully so far) for minimum European Union statutory company tax rates. See Tax Notes International (2004, p. 1001).

International trends in company tax rates

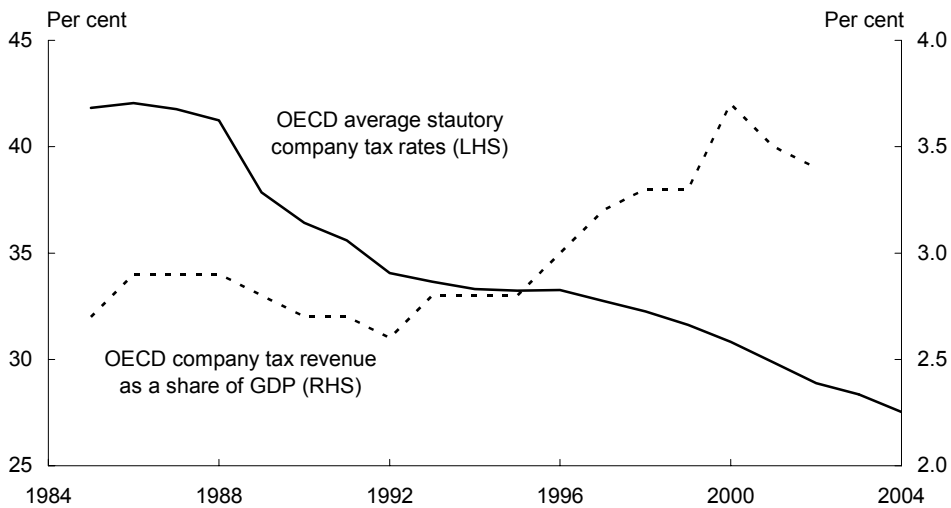
**Chart 2: OECD and European Union statutory company tax rates<sup>(a)</sup>**



(a) Rates also include surtaxes and sub-national taxes on company income. Averages are unweighted. Source: KPMG (2004, Table 2, p. 2).

However, Zee (2004, p. 356) claims the pace of decline since 2000 is slower than between the mid-80s and mid-90s. Either way, such past trends are not a sure guide to the future and the current consensus appears to be that statutory company tax rates are not inexorably heading to zero.

**Chart 3: Historical trends in OECD statutory company tax rates and company tax revenue<sup>(a)</sup>**



(a) Rates are top federal statutory company tax rates. Averages are unweighted. Source: OECD Tax Database; KPMG (various years); OECD (2004).

Significantly, to date, declining statutory company tax rates have not reduced company tax collections as a share of GDP (Chart 3). This is because declining statutory company tax rates often are accompanied by tax base broadening, as well as growth of the corporate sector and its improved profitability over the relevant period (Zee 2002, p. 1196).

While international tax competition possibly forced the decline in statutory company tax rates, alternatively, policy makers or electorates may have adopted what appears to be a successful policy implemented by other countries.<sup>6</sup> Domestic considerations also may have been relevant. In Australia, the benefit of removing economic distortions by broadening the company income tax base was a significant policy influence.<sup>7</sup>

### How Australia's statutory company tax rate compares

Australia's 30 per cent statutory company tax rate is close to or below average.

Looking at top federal statutory company tax rates alone, Australia's 30 per cent rate lies in between the GDP-weighted OECD average (31 per cent) and the unweighted OECD average (28 per cent).<sup>8</sup> The higher weighted average largely reflects the relatively high rate levied in the United States.

Taking account of surtaxes and sub-national taxes that many countries (but not Australia) levy on company income, the comparison is even more favourable. Australia's rate is considerably below the GDP-weighted OECD average (37 per cent) and only slightly above the unweighted OECD average (29.96 per cent).<sup>9</sup>

A 30 per cent statutory rate or thereabouts is commonplace, even in the Asia-Pacific region (Chart 4). Chile at 17 per cent, Hong Kong at 17.5 per cent, Singapore at 22 per cent and Chinese Taipei at 25 per cent, are significant exceptions.

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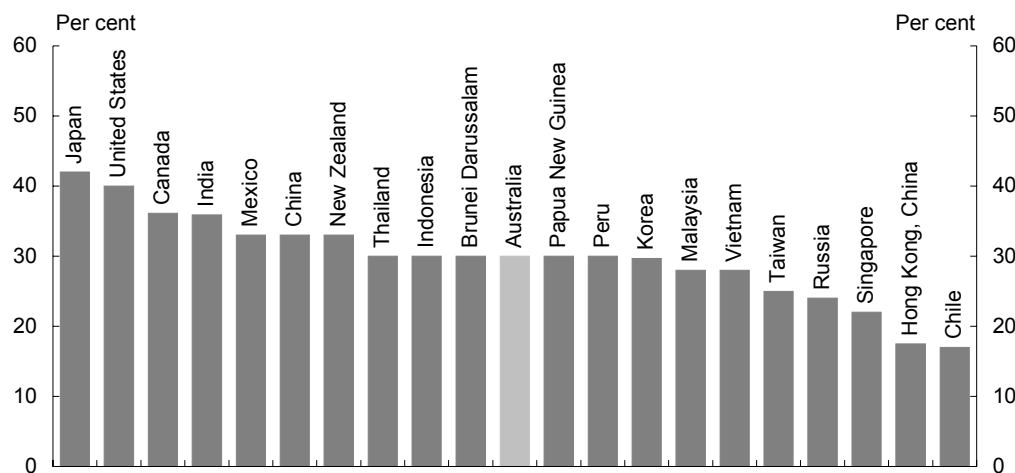
6 Devereux et al (2003) consider whether the decline is driven by *tax competition* to attract the mobile element of the company income tax base, or *yardstick competition* where voters in one country compare themselves with other countries, or whether a *common intellectual trend* influences policy-makers in one country to institute reforms of another country. They tentatively conclude tax competition is the best explanation.

7 For other (domestic) factors that may influence statutory company tax rate trends, see Slemrod (2004). He finds a strong association between the top personal income tax rate and the statutory company tax rate.

8 Estimated using the OECD Tax Database. The GDP weights are based on nominal GDP of the OECD countries in US\$ at market exchange rates.

9 Estimated using the statutory company tax rates, including surtaxes and sub-national taxes, from KPMG (2004).

**Chart 4: Australia's company tax rate relative to Asia-Pacific economies<sup>(a)</sup>**



(a) Rates also include surtaxes and sub-national taxes on company income.  
Source: KPMG (2004).

Australia's 30 per cent rate is also comparable with the rates of the immediate sources of foreign direct investment (FDI) in Australia (Table 1), and of the major destinations of Australian FDI overseas (United States, United Kingdom and New Zealand).

**Table 1: Major sources of FDI in Australia, 2003**

Country	Share of total FDI in Australia (%)	Company tax rate <sup>(a)</sup>
United States	29.1	40(b)
United Kingdom	21.6	30(b)
Japan	7.5	42(b)
Netherlands	4.4	34.5
Germany	3.5	38.3

(a) Rates (as at 1 January 2004) also include surtaxes and sub-national taxes on company income.  
(b) Country has foreign tax credit system for taxing foreign source income from offshore subsidiaries and branches.  
Source: ABS (2004a); KPMG (2004).

### Trends in effective company tax rates

So far this article has focussed on statutory company tax rates. However, actual tax paid can differ significantly from what the statutory rate alone would suggest. It is important therefore to consider trends in effective company tax rates.

#### What are effective company tax rates?

An effective tax rate looks at actual tax payable (historical or hypothetical) against actual income (historical or assumed). An effective rate can differ from the statutory

rate because of taxable income differing from actual income (due, for example, to accelerated depreciation), other features of the tax law (such as tax offsets), or non-compliance.

Unlike statutory rates, effective tax rates are not readily observable. Researchers use various methods to measure representative effective company tax rates.<sup>10</sup> In making international comparisons, a country's international ranking can vary considerably depending on the effective tax rate measure adopted.

Unfortunately, all effective tax rate measures have significant methodological and/or data problems. For effective tax rate measures using historical data, inadequate data complicate comparisons of rates over time and between countries. Hence, robust estimates are difficult to find.<sup>11</sup> Effective tax rates for hypothetical investments are highly stylised and cannot capture all relevant aspects of a tax system.

#### Effective tax rate trends

Yoo (2003) compares effective marginal tax rates and effective average tax rates.<sup>12</sup> He calculates the rates for hypothetical investments applying to cross-border investments between pairs of OECD countries. The estimates take account of the home tax system (where the investment is financed from) and host tax system (where the investment is made).<sup>13</sup>

Yoo estimates effective marginal and average tax rates declined for inbound FDI from 1991 to 2001. Effective marginal tax rates fell on average by around 9 percentage points between 1991 and 2001, and effective average tax rates by around 4 percentage points between 1996 and 2001. There was some convergence in effective rates between countries, especially effective average tax rates (Chart 5).

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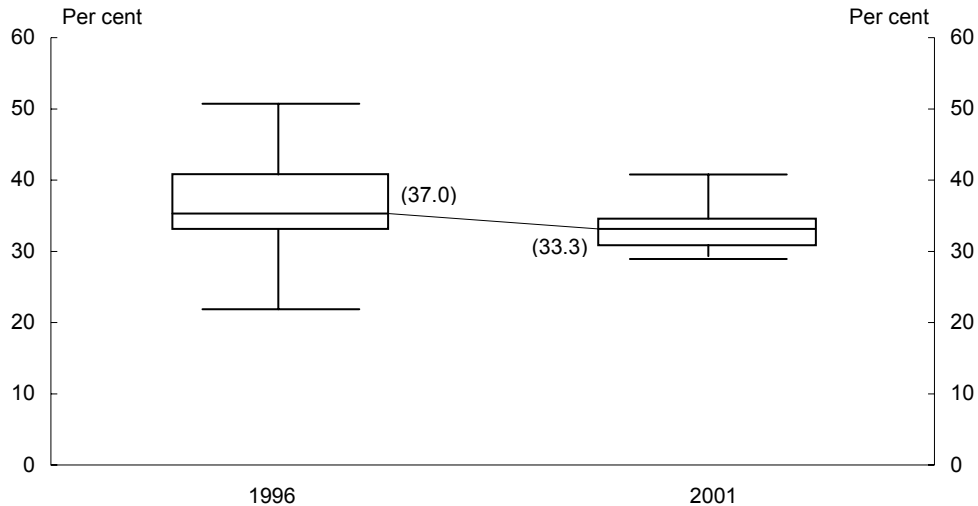
10 OECD (2000) provides a general overview of tax burden measures. See also Devereux and Griffith (2003).

11 OECD (2001b, pp. 31-32, and Tables 17 and 21 at pp. 56-57, 67-69) provides estimates comparing aggregates of relevant tax collections and a measure of corporate operating surplus derived from national accounts statistics for some OECD countries from 1965 to 1996, including Australia. However, the authors note significant problems with them.

12 An effective marginal tax rate is the rate that applies to an investment that earns just enough to break even with a company's cost of capital (the minimum return a company must offer investors, whether shareholders or lenders, for them to invest or retain their investment in the company). An effective average tax rate is the rate of tax on investments earning returns greater than a company's cost of capital. See Devereux and Griffith (2003).

13 The estimates provide an upper bound estimate only as they do not account for many of the tax minimisation strategies available to multinationals.

**Chart 5: Effective average tax rates on FDI between OECD countries, 1996 and 2001<sup>(a)</sup>**



(a) The box plot shows, in each year, the median OECD value of the effective *average* tax rate imposed on inward FDI (the horizontal line in the box), the third and second quartiles of the cross-country distribution (the edges of each box) and the extreme values (the horizontal lines above and below each box). Averages are provided in parentheses.

Source: Yoo (2003, Figure 1, Panel B).

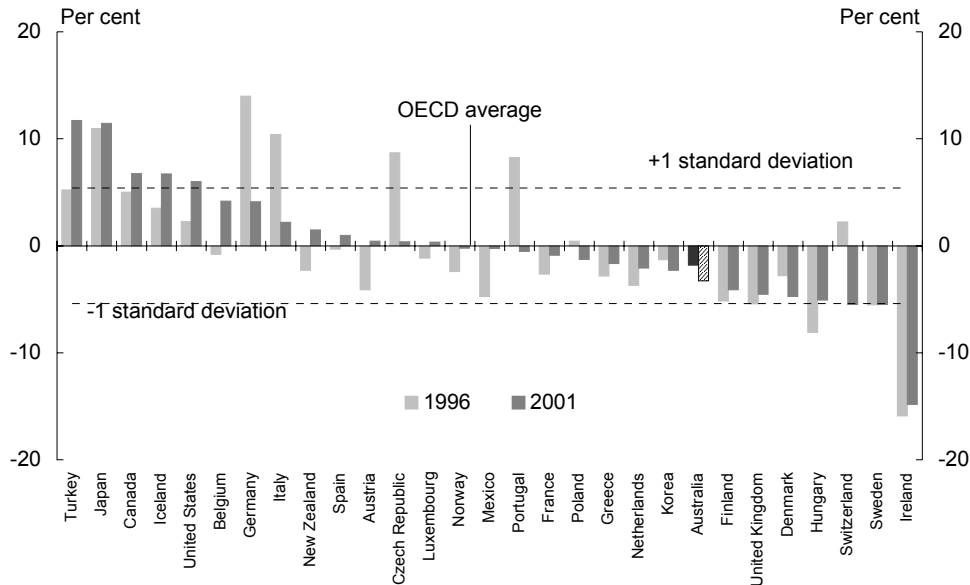
Effective average tax rates may better measure the tax incentives a multinational may face in choosing a country in which to locate a large, discrete, investment project. Effective marginal tax rates, which relate to a project's break even point, may be more relevant for deciding a project's scope once the country location choice is made.<sup>14</sup> In Yoo's estimates for 1996 and (even more so) for 2001, Australia's effective average tax rate on inbound FDI was moderately below the OECD average (Chart 6).

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14 For further discussion see Devereux and Griffith (2003). Devereux et al (2002) found that effective marginal tax rates have not declined significantly since the early 1980s whereas effective average tax rates have. This is unsurprising given that the latter are more closely correlated to statutory rates than the former (for which the company tax base is relatively more important), and statutory rates have declined while the company tax base has broadened.



**Chart 6: Difference in country effective average tax rate on inbound FDI from OECD average, 1996 and 2001**



Source: Yoo (2003, Figure 4, Panel B).

### Other measures of tax burden

Other measures are often used to consider tax trends and international tax competitiveness. These include the ratios of total tax revenue collected to GDP, company tax collected to GDP, and company tax collected to total tax revenue.

For OECD countries, total tax revenue to GDP ratios have risen consistently since the 1960s, though the pace has slowed. In very recent years, the rise has stalled and partially reversed in some countries. This could reflect cyclical factors and may not last. On a total tax revenue to GDP basis, Australia is below the OECD average.<sup>15</sup>

Company tax revenues to GDP have been fairly steady (Chart 3). Since 1980, the weighted OECD average has been steady, but moving in line with the economic cycle. However, the unweighted average has increased, possibly because of profit shifting to small, low tax rate, OECD countries (Griffith and Klemm 2004, pp. 16-17).

By OECD standards, Australia's company tax to GDP ratio is high, 5.3 per cent in 2002 against an unweighted OECD average of 3.4 per cent. A high ratio can reflect non-tax

15 See OECD (2004), the source for figures on the other measures of tax burden referred to in this section.

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factors such as a high proportion of businesses being incorporated, a relatively profitable corporate sector, and differences in revenue data and GDP estimates.<sup>16</sup>

Finally, for OECD countries the weighted average of company tax as a proportion of total tax revenue has declined since 1965. However, since the 1980s they have remained fairly stable (Griffith and Klemm 2004, pp. 17-18). These trends reflect total tax revenue to GDP increasing over time while company tax to GDP has remained steady.

Australia's high company tax to GDP ratio, and low total tax revenue to GDP ratio, means Australia has a high company tax to total tax revenue ratio – 16.8 per cent in 2002 against an unweighted OECD average of 9.3 per cent. These ratios are heavily influenced by taxes completely unrelated to company and capital income, and so have limited value.

Note that ratios of both company tax to GDP and company tax to total tax revenue typically do not take account of company and personal income tax integration. For example, they do not adjust for the tax benefit an imputation system provides to resident shareholders for company tax paid.

## Two basic roles for company income tax

Australia's company income tax applies to Australian resident companies and Australian branches of foreign companies.<sup>17</sup> For 2003-04, total company tax revenue (on a cash basis) was \$36.1 billion, or 21 per cent of total Australian Government tax revenue.<sup>18</sup>

In theory, company income tax is *not* a necessary part of a comprehensive income tax system. That is, if unrealised gains were subject to accruals taxation, or if a company's income was fully attributed to its underlying shareholders (like the treatment of partners in general partnerships), then company income tax would be unnecessary.

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16 For example, OECD revenue statistics treat tax collected on superannuation funds' contributions and earnings (but not the superannuation surcharge) as part of total Australian company tax revenue.

17 A company is resident in Australia if incorporated in Australia, or if it carries on a business in Australia and has either its central management and control in Australia or its voting power controlled by resident shareholders.

18 Australian Government (2004a, Table C3). Australian Government (2004b, pp. 5-10, 5-11), discusses the recent strength of Australian company tax revenues.

For various reasons neither alternative is feasible.<sup>19</sup> Hence, Australia's company income tax system fulfils two basic roles:

- a (withholding) tax on the income earned by Australian residents through an Australian resident company;<sup>20</sup> and
- a tax on (Australian source) income earned by foreigners through an Australian company or the Australian branch of a foreign company.

Other reasons are sometimes given for company income tax. These include: companies having a separate legal identity; a user charge for the limited liability status of companies; a user charge for public goods such as an educated workforce and public infrastructure; and ease of tax collection. These are, at best, of secondary importance.<sup>21</sup>

### Taxing residents

Company income tax helps to ensure that residents are appropriately taxed on their income.<sup>22</sup> Without company income tax, a resident could accumulate income tax-free in a company. Tax would be deferred until the resident sells the shares in the company or receives a dividend.

In Australia, resident shareholders are taxed on dividends received but are credited for Australian company income tax on the profits from which the dividends are paid. Hence, company income tax in Australia effectively acts as a withholding tax on income residents earn through a company. Given imputation, there are some benefits in aligning the company and top personal tax rate.<sup>23</sup>

While company income tax generally taxes income from capital, it also effectively taxes the labour income of the incorporated self-employed or contractors. Hence, the residents' tax role is relevant to both capital and labour income.

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19 Examples include valuation difficulties and compliance costs in allocating taxable income to underlying shareholders, especially where ownership changes during a year.

20 The 'controlled foreign companies' and 'foreign investment fund' rules perform a similar policy function for income derived by Australian residents through foreign companies.

21 For example, the limited liability status argument would only justify a low company tax rate, while the public goods provided to companies and a profit based company tax are not directly connected. For further discussion of the rationales for company income taxes, see Bird (1996), Mintz (1996) and Slemrod (2004).

22 See Gordon and MacKie-Mason (1994) for a discussion.

23 Such an alignment may not fully remove the incentives to earn income through a company, as it ignores possible differences in personal and company income tax bases, income-splitting benefits, and higher effective personal income tax rates arising from the means-testing of benefits.

## Taxing foreigners on Australian source income

Australia taxes capital income earned by foreigners investing in Australia principally through company income tax. It applies to investments through an Australian subsidiary, or a non-controlling (portfolio) shareholding in an Australian company, or through an Australian branch of a foreign company.

Foreigners owned around 30 per cent of equity issued by Australian enterprises as at 30 June 2003 (ABS 2004b). Given total company tax revenue was \$36.1 billion in 2003-04, and certain simplifying assumptions, this implies company tax revenue from taxing foreigners' Australian source income is around \$11 billion per annum.

To determine the appropriate statutory company tax rate for this role, government must weigh up the benefits of raising revenue from foreigners against the potential costs of deterring investment into Australia. International company tax rates can affect these assessments. The remaining sections focus on these benefits and costs.

## Balancing the two roles

While the focus of this article is on the role of company income tax in taxing foreigners, the residents' tax role is also important. The choice of a single statutory company tax rate must balance both. Hence, Australia's statutory company tax rate is likely to lie somewhere between the rates that each role would suggest.

Fairly recent history illustrates the tension between the two roles. After imputation was introduced in the late 1980s, the statutory company tax rate was briefly aligned with the top (statutory) personal income tax rate, at 49 per cent.<sup>24</sup> A reason given for alignment was eliminating opportunities to defer tax by accumulating income in a company – consistent with the residents' tax role (Keating 1985, p. 4). However, the statutory company tax rate was soon lowered to 39 per cent. That drop was justified partly to boost international competitiveness.<sup>25</sup>

## Company income tax and attracting foreign investment

Lowering company income tax on foreigners who invest in Australia could help Australia compete for more foreign investment. Attracting FDI in particular is the primary goal of many who advocate reductions in statutory company tax rates.

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24 Alignment was achieved by increasing the statutory company tax rate while reducing the top statutory personal income tax rate.

25 The related broadening of the company income tax base would also reduce distortions in respect of the investment decisions of companies. See Keating (1988, pp. 6-7).

FDI measures foreigners' investments in Australian companies they control or Australian branches. It measures financial interests, not investment in new factories, services and business. Hence, an increase in FDI does not directly translate into increased real investment in Australia.<sup>26</sup>

Even assuming a statutory company tax rate reduction has a positive impact on inbound FDI (the evidence on this is discussed below), doing so will not necessarily improve Australians' wellbeing.

Potential benefits to Australia of greater FDI include:

- if Australia's capital stock increases, greater labour income through increased productivity and possibly employment; and
- positive externalities or spill-overs associated with FDI which improve labour and capital productivity, and hence labour and (residents') capital income.<sup>27</sup>

Capital income from any net increase in Australia's capital stock accrues to the foreign investors, without direct benefit to Australia other than source tax revenue (see below). If increased inbound FDI simply displaces Australian ownership of Australia's capital stock, offset by increased ownership of assets overseas by Australians, the net capital income of Australian residents will not necessarily change.

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26 FDI may be associated directly with a new real investment in Australia, although this may crowd out an investment that would otherwise have been made. FDI may reflect the acquisition of an existing business, although vendors may use the sale proceeds to undertake additional real investment. FDI may arise if an amount is invested in an Australian subsidiary (inbound FDI), which in turn invests in a subsidiary of its own in a third country (outbound FDI).

27 Potential positive externalities or spill-overs include Australians learning new business methods and skills, developing overseas contacts, benefiting from technology transfer, and increasing competition in domestic markets. Lipsey (2002) reviews evidence of home and host country effects of FDI on exports, wages, and productivity.

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The costs for Australia arise primarily from the reduced revenue collections from foreigners due to the lower company tax rate. More precisely:

- reduced revenue from existing FDI in Australia (a transfer of wealth to foreigners from Australians), offset by revenue on capital income arising from any net increase in the capital stock and revenue accruing from reduced incentives to shift profits out of Australia;<sup>28</sup>
- negative externalities (for example, FDI could reduce domestic competition in specific cases); and
- further compromising the effectiveness of company income tax in its role of taxing residents.

A national accounts measure of national income would capture most of the above benefits and costs. Therefore, gross national income better measures the net benefits than observing responses in inbound FDI. Even then, other consequences of the change need to be factored in to assess the change in wellbeing of Australians.

A reduced statutory company tax rate, irrespective of the impact of inbound FDI, also may encourage Australian companies to invest domestically rather than overseas.

On the other hand, government may need to increase taxes elsewhere (or reduce them by less than they otherwise would) to maintain total revenue. The economic costs associated with these offsetting tax changes also need to be taken into account. Such 'revenue constrained' tax policy choices are the focus of 'optimal tax' analysis. A well-known optimisation argument is directly relevant to the discussion above.

## Optimal tax arrangements for a small capital importing country

For a small capital importing country, if capital is perfectly mobile between countries but labour (the other factor of production) is immobile, a tax on the income derived by the foreign capital that it imports is sub-optimal.

Taxing the domestic source capital income of foreigners causes them to reduce their investment in the country until the marginal post-tax rate of return equals the (unchanged) returns available from investing elsewhere. Foreigners' after-tax returns are therefore unaffected, so they do not bear the cost of the tax. However, by reducing

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28 Ireland appears an example of a case where the offsetting revenue gains appear to have been greater than the upfront cost. Additional revenue also may be collected if labour income and capital income accruing to Australians increases. However, as these (gross) income effects already were identified as benefits, further identifying any associated revenue gains would involve double counting.

their total investment, the country's capital stock declines. The decline reduces domestic labour productivity and hence income.

Domestic labour, not foreign investors, therefore bear the real cost of taxing the domestic source capital income of foreigners. To raise revenue, a direct tax on labour income would be optimal: the incidence of the tax would still be on labour, but it avoids the efficiency costs from a smaller capital stock.

This encapsulates the basic argument for reducing company tax rates to attract more foreign investment.<sup>29</sup> However, even if accepted, some factors would still justify taxing such income:

- the home country of a foreign investor also may tax the investor's Australian source income, but credit the Australian tax paid. Most FDI into Australia is from countries that operate such foreign tax credit systems (Table 1).<sup>30</sup> However, credits are effectively not provided on a one-for-one basis;<sup>31</sup>
- economic rents (returns above the cost of capital) may be available only from investing in Australia (for example, investments in natural resources or a non-tradable sector like construction). If foreigners only realise these 'extraordinary' profits by investing in Australia, some tax on these rents will not deter investment;<sup>32</sup> and
- existing investments may be locked in (or 'sunk').

All three factors suggest reasons why, even if capital is otherwise mobile, foreign investment into Australia may be insensitive to the present level of Australian tax. The next step, therefore, is to consider the evidence on the tax responsiveness of cross-border investments.

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29 For consideration of how the optimal tax outcome may differ if alternative assumptions are made, see Devereux (2003).

30 Other countries, including Australia, generally exempt the income from outbound FDI.

31 Countries limit credits for foreign tax to the amount of domestic tax payable; countries do not in general tax (and hence credit) Australian source income on an accruals basis, diminishing the present value of the credits; and credits for Australian tax paid on Australian income are typically pooled with credits for other income.

32 On the other hand, economic rents may arise from firm-specific factors that can be realised regardless of the country in which an investment is made (for example, a factory that produces for export, for which any above-normal profits are attributable to the intellectual property of the firm). Such investments can be highly mobile, and are arguably the focus of tax competition between countries; see Devereux and Griffith (2003).

## Cross-border investments and profit shifting and company income tax

### Cross-border investments

Company income tax is only one factor affecting the level and allocation of cross-border investments. Other taxes, such as tariffs and withholding taxes may feature. More important still are non-tax factors such as closeness to final markets, availability of inputs to production, labour market conditions, well-developed property rights, and political and economic stability.<sup>33</sup>

Considerable research has been undertaken on the responsiveness of cross-border investments – principally FDI, but also related concepts, such as property, plant and equipment, or new capital investment. The studies are not definitive as they suffer from problems with data and in disentangling tax effects from other influences. Results also vary considerably between studies.

However, some conclusions that can be drawn from the research are that:

- cross-border investments are significantly influenced by company tax, though this is difficult to quantify, and this influence is increasing over time;
- company tax is more significant in determining the allocation of investment within, rather than between, regions;
- company tax is a more significant factor for some investments than others (for example, location of intra-group service providers);
- new investments are sensitive to tax rates while acquisitions of existing businesses (mergers and acquisitions) are not;<sup>34</sup>
- effective tax rates are more important than statutory tax rates;
- certainty and transparency of tax treatment are important; and
- investments sourced from countries with a foreign tax credit (as opposed to exemption) system may be relatively less sensitive to host country company tax rates, but evidence of this is not conclusive.

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33 Unsurprisingly, the sensitivity of cross-border investments to company income tax may depend on interaction with non-tax factors. Grubert and Mutti (2000) found the sensitivity of the real capital investments of US multinationals to host country average effective tax rates was significantly greater for countries with an open, rather than closed, trade regime.

34 Mergers and acquisitions typically represent a major part of inbound FDI.



Some general surveys of relevant econometric (statistical) studies have estimated the average quantitative response found by the underlying studies.

Hines Jr (1999) found statistically significant and important tax impacts on both the level and allocation of FDI. He found the studies suggested a tax elasticity of FDI of -0.6 per cent. That is, a 1 per cent reduction in the relevant tax rate (for example, from 30.0 to 29.7 per cent) increases inbound foreign investment by 0.6 per cent.

Reviewing 25 studies, de Mooij and Ederveen (2001) estimated that they showed a semi-elasticity of -3.3 per cent. That is, a 1 percentage point reduction in the modelled tax rate (30 to 29 per cent) is associated with a 3.3 per cent increase in inbound investment.

The policy usefulness of these averages (and specific estimates) is questionable given differences in investment measures, tax rate measures, and other aspects of the studies.<sup>35</sup> Further, they may not be relevant to Australia and they say nothing directly about net additions to a country's aggregate capital stock.

#### Profit shifting between countries

To minimise tax paid worldwide, multinational groups may artificially shift profits from a high-tax country to a low-tax country by:<sup>36</sup>

- allocating proportionally more debt to group companies in high-tax countries than in low-tax countries (thin capitalisation);
- having group companies in high-tax countries undercharge for sales, or overpay for purchases, to or from group companies in low-tax countries (transfer pricing); or
- paying royalties from group companies in high-tax countries to group companies in low-tax countries for the use of intangibles such as brand names.

These practices principally create a benefit that is a function of differences in statutory company tax rates in the relevant countries.

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35 See Devereux and Griffith (2002) for a sceptical view of these estimated averages.

36 High and low-tax are relative terms. Hong Kong is seen as a low-tax jurisdiction but has acted to guard against transfer pricing. Even between OECD nations profit shifting appears significant, see Bartelsman and Beetsma (2003).

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While high-tax countries typically guard against such practices, profit shifting nonetheless occurs.<sup>37</sup> Differences in statutory company tax rates significantly affect the allocation of debt within multinationals, levels and direction of royalty payments, and location of reported profits (firms in tax havens typically are more profitable).

However, Australia appears relatively unaffected by such practices.<sup>38</sup> This may reflect stronger protective measures and stricter enforcement than in other countries. Australian multinationals also have an incentive to shift profits to Australia to pay Australian rather than foreign company income tax.

By paying Australian company income tax, even where statutory rates are the same, an Australian multinational generates tax credits for its resident shareholders. A move away from imputation would remove this incentive to shift profits here and pay Australian rather than foreign tax.

The importance of statutory company tax rates in profit shifting suggests that, for a given effective tax rate, a low rate/broad base is preferable to a high rate/narrow base. Unsurprisingly, a switch to the former has been evident worldwide in recent years. Hence, declining statutory company tax rates coupled with base broadening may be due partly to company tax revenue protection rather than tax competition.<sup>39</sup>

Profit shifting behaviour also means the revenue cost to a country from lowering its statutory company tax rate (or gain from increasing it), may not be as significant as tax collection data suggest. More than 65 per cent of additional revenue from a unilateral company tax increase could be lost (Bartelsman and Beetsma 2003). For Australia, the empirical evidence and the countervailing influence of imputation suggest this effect would be much less pronounced.

## Observations on the implications of recent trends

### The links between international and Australia's statutory company tax rates

As discussed, optimal tax theory provides an argument for small capital importing countries to avoid taxing the income of foreign capital. The logic of this argument is true *regardless* of company tax rates overseas or movements in those rates. It is often

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37 See, for example, Kinney and Lawrence (2000), Swenson (2001), Gordon and Hines Jr (2002, pp. 49-58), Bartelsman and Beetsma (2003), Grubert (2003) and Mills and Newberry (2004).

38 See Bartelsman and Beetsma (2003) and Sullivan (2004).

39 Separately from Devereux et al (2003) (see footnote 6), Devereux et al (2002) tested these two explanations and could not conclude in favour of the tax competition explanation.

assumed that lower company tax rates overseas mean that Australia's rate needs to be lower, without explanation of the causal links that make this so.

A relationship does exist between Australia's statutory company tax rate and those in countries with foreign tax credit systems. In 2003, at least 60 per cent of the stock of inbound FDI was from countries with a foreign tax credit system whose own statutory company tax rate equalled or exceeded Australia's.<sup>40</sup>

Lower statutory tax rates in these countries could directly affect Australia. However, evidence of a relationship between the tax responsiveness of FDI and the presence of a foreign tax credit or exemption system in the home country is not strong.

This may not be true of the specific case of investment in Australia or it may reflect some of the underlying problems with the empirical studies. Bénassy-Quéré et al (2003) found asymmetries in the responsiveness of FDI to tax rates. The sensitivity of FDI to tax rates was much higher where a country's tax rate was significantly higher than average. Where a country's tax rate (as Australia's is) was around or below average, the FDI response to a change in the rate was much reduced. Such outcomes are consistent with the operation of foreign tax credit systems.

A second direct link between Australia's statutory company tax rate and those overseas occurs with profit shifting. The difference between Australia's statutory rate and those overseas will influence the degree and direction of profit shifting.

### Alternative approaches

Even if lowering Australia's statutory company tax rate to attract greater FDI would have net benefits, the implications for the taxing of residents would need consideration. Satisfying two goals using a single rate is difficult; some countries have considered broad-ranging reforms to overcome this constraint.<sup>41</sup>

#### New Zealand's split company tax rate proposal

New Zealand considered the most direct alternative following a recent tax review (McLeod et al 2001). The approach was to apply a lower statutory company tax rate (18 per cent) *to the extent* a New Zealand company was owned by foreigners. For ownership by New Zealanders, the standard (33 per cent) rate was to apply.

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40 Relative statutory tax rates are important as foreign tax credit systems do not provide a credit for foreign tax paid above the domestic tax payable.

41 For an overview of the merits of reducing statutory company tax rates versus more specific investment incentives (for example, tax holidays and capital allowances) see OECD (2001a).

## International trends in company tax rates

This approach was intended to improve New Zealand's competitiveness in attracting FDI. Apart from reducing effective rates, it was also thought there would be direct benefits from a low 'headline' rate.

Assuming a split rate system could be implemented without residents accessing some of the benefits, a lower rate for foreign owners would not have directly affected the taxing of income earned by New Zealanders through New Zealand companies.

However, New Zealand eventually decided against the proposal. The benefit of a likely increase in inbound FDI was not enough to outweigh the revenue cost (and loss to New Zealand's national income) from a reduced rate on existing as well as future foreign investment (Lynch and Peters 2003).

Such an outcome reflects the observation that where pre-existing investments of foreigners are locked-in, taxing the income of foreign investment is more readily justified. New Zealand considered only applying the lower rate to 'new' investments, but felt that distinguishing between existing and new investments on a permanent basis would be impractical.

## Scandinavian dual income taxes

In the early 1990s, Norway, Finland, Denmark and Sweden introduced (to varying degrees) dual income tax systems. Under a dual income tax, capital income is taxed at a relatively low flat rate (in practice, around 30 per cent). Labour income remains subject to tax against a (higher tax) progressive rate schedule.<sup>42</sup>

The move to dual income taxes was partly a response to international tax competition for capital. Deficiencies in the capital income tax bases of these countries meant previous arrangements had also not collected significant revenue from capital income. The move therefore was accompanied by considerable base broadening.

A dual income tax responds to international tax competition to attract (and retain) capital while retaining a domestic policy focus for less mobile (labour) income. To ensure that labour income cannot benefit from the lower rate of tax on capital income, a dual income tax system taxes the implicit labour income of the self-employed (whether incorporated or unincorporated) against the progressive rate schedule.

The difficulty (and increased importance) of distinguishing between labour and capital income is a significant challenge for dual income taxes.

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42 For an overview, see Zee (2002).

## Future US developments

The United States has not participated in the trend of declining statutory company tax rates for nearly two decades. It has not reduced its (Federal) statutory rate since 1986, when it was cut from 46 to 34 per cent. Instead, the United States increased its rate slightly in 1993 to 35 per cent. It also maintains a foreign tax credit system for taxing repatriated foreign source income.

In international tax policy, other countries often follow US leads. If the United States substantially cuts its statutory company tax rate, this is likely to have significant flow-on effects internationally. If the United States moved away from providing foreign tax credits for earnings repatriated from offshore subsidiaries, this could also have widespread international ramifications.

## Conclusions

Statutory company tax rates around the world have declined significantly in recent decades. This is likely to continue in the short-term at least, although the rate of decline may be diminishing and convergence (rather than a headlong fall to zero rates) taking place.<sup>43</sup> Effective company tax rates also have declined, but not as much as statutory rates. Australia's experience reflects these trends.

There is a link between the level and allocation of cross-border investments and company tax. The sensitivity of cross-border investments to tax also appears to be increasing.

If reducing company tax to attract more foreign investment was thought justified, lowering the statutory company tax rate would generally be preferable to narrowing the company tax base because:

- a broader base minimises distortions in the allocation of capital within Australia;
- a lower statutory rate provides a better outcome in respect of profit shifting;
- if competition between countries is primarily for discrete high profit investments, then reducing the statutory rate is a better targeted response; and
- a statutory company tax rate reduction is more visible and may provide a positive 'headline' effect for any given effective tax rate.

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<sup>43</sup> Countries that have already foreshadowed future statutory company tax rate cuts include: Austria (34 to 25 per cent); France (removal of 3 per cent company surtax); Netherlands (34.5 to 30 per cent) Romania (25 to 19 per cent); and Singapore (22 to 20 per cent).

#### International trends in company tax rates

The benefits of increased foreign investment from cutting the statutory company tax rate must, however, be weighed against the costs (largely revenue) and implications for taxing residents. Moreover, it is not clear that there are significant competitiveness problems with Australia's current statutory company tax rate, which is around the OECD average. It is also less than or equal to our major sources (and destinations) of FDI, and the most important of these sources provide a credit (albeit imperfectly) for Australian company tax paid.

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