Medium Term Tax Policy Challenges and Opportunities

Executive Summary

- Our tax system is basically sound and generally performs well by international standards. However our increasing integration into the global economy, especially Australia, is putting greater pressure on the NZ tax system.
- These pressures are best addressed through a strategy of incremental reform towards a clear long-term vision for the NZ tax system. This would have a number of advantages including: guiding each step in a series of tax reductions, introducing more certainty and clearer expectation around the direction and motivation for change, and establishing a debate focussed around medium-term strategy rather than immediate issues.
- The international dimension is crucial: our tax bases are becoming more internationally mobile. New Zealand probably has the most internationally mobile labour force in the OECD, and we have very high levels of inward investment.
- Two emerging concerns are:
  - Relatively high effective personal marginal tax rates including abatement of tax credits (exceeding 50% for many households).
  - Very different marginal tax rates applicable to different investment types, distorting investment into tax-favoured vehicles and generating tax-motivated incorporation.
- We consider that, from an efficiency and productivity growth perspective, the highest priority is to reduce this disparity, first by cutting the current top personal tax rates.
- A broader programme of rationalisation of income tax rates and base broadening (including taxing capital gains) would likely offer greater productivity gains than rate reductions alone.
- Aggregate measures of the distribution of income are relatively insensitive to changes in tax scale design. Transfers have a far bigger impact on these aggregate measures. Net taxes (taxes less transfers) are negligible or negative for the bottom half of households ranked by income. Therefore suitably targeted transfers (and base broadening measures such as capital gains taxation) are more direct means of delivering equity objectives.
- Average corporate tax rates in the OECD continue to trend down, and NZ's 30% rate is relatively high, with small OECD countries having an average company tax rate of 26% in 2008.
- International pressures to reduce our corporate tax rate further are likely to intensify. Finding a suitable balance between (lower) corporate rates and a compatible set of personal tax rates in the medium-term will be crucial for revenue-raising and economic efficiency.
- Demographic factors - in the form of population ageing - will become more important over the next 20-50 years with more taxpayers relying on (untaxed) pensions and consuming a greater fraction of their incomes.
- The above factors suggest longer-term gains from moving towards a tax system more heavily weighted towards consumption taxes and examining the feasibility (over a longer horizon) of a greater contribution from property taxes.

Key Section Messages

Section 1 – Introduction

Key messages:

- Tax systems are designed to raise revenue as efficiently as possible whilst contributing to redistributional objectives. To retain these properties, they need to adapt to changing circumstances.
- Globalisation is on a persistent upward trend and New Zealand is an especially 'open' economy for labour, capital and goods.
- As a result, to maintain tax revenue integrity and avoid inefficiencies, taxes in New Zealand can no longer be set independently of international settings.
- Some existing policy settings result in New Zealanders facing variable but generally high effective tax rates that are harming incentives and encouraging significant tax-planning.

Section 2 – New Zealand's Taxes in an International Context

Key messages:

Compared to other OECD countries:

- Personal income tax revenues (as a % of GDP) are high, especially relative to comparable OECD members.
- New Zealand makes little use of social security taxes on labour. *This raises the weight of taxes on capital income in New Zealand compared to other OECD countries.*
- New Zealand had the OECD's 2nd highest growth of personal income tax revenues from 2000-06.
- New Zealand's tax mix is weighted towards corporate taxes and away from property taxes: a potentially growth-retarding combination.

Section 3 – Taxes and Economic Performance

Key messages:

- There is increasingly robust evidence that tax affects GDP and productivity (labour & TFP) growth in the short- and medium-term, and quite possibly the long-term too.
- Recent OECD evidence supports this at the firm and sector level.
- Effective rates of both corporate and personal income tax are important for productivity and investment; they affect firms' investment decisions via the cost of capital.
- The type of taxes levied matters for growth: corporate and progressive income taxes have the most adverse growth effects, consumption and property taxes the least adverse.

Section 4: Personal Taxes and Transfers

Key messages:

- Relatively high marginal tax rates (MTRs) arise mainly from the 33% & 39% rates plus abatement of Working for Families at a further 20%.
- High marginal and average tax rates discourage entrepreneurship and participation in New Zealand's labour market, and may encourage trans-Tasman migration.
- There are high tax rates on many forms of capital income with distributed profits often facing effective MTRs of 39/59%.
- But variable rates of income tax on different income sources and investment (including tax-free capital gains) distorts investment choices towards tax-favoured options (Trusts, Portfolio Investment Entities (PIEs), property), generates tax-planning and increases deadweight costs of taxes.

Personal Taxes and Transfers (continued)

Key messages:

- 'Net' taxes (that is, income tax paid less transfers received) are negligible or negative for around half of all households.
- The 39% rate of income tax contributes little to redistribution across households; transfers such as Working for Families (WfF), and public health/education expenditures are much more effective.
- WfF transfers have had significant impacts on equity in recent years and had positive effects on the labour force participation of targeted groups such as sole parents. Greater targeting could further equity and participation effects while saving on fiscal cost.
- The distribution of assets (excluding owner-occupied housing) across households is similar to the distribution of income. Owner-occupied housing is *more equally* distributed than income.

Section 5: Corporate Taxes

Key messages:

- International downward trends in statutory rates of corporate tax have been evident for decades and can be expected to persist.
- New Zealand once led the way but our 30% rate is now higher than the OECD average and well above other 'small open' economies.
- Robust evidence suggests that internationally footloose investment and corporate profits in OECD countries are highly sensitive to cross-country differences in corporate tax rates.
- Internationally, corporate tax revenues (as a % of GDP) have generally held up well partly through base broadening (e.g. reduced generosity of depreciation deductions).
- New Zealand's corporate tax revenues have risen sharply in recent years mainly via a growing ratio of corporate taxable profits to GDP. Some of the revenue increase reflects higher-rate taxpayers reducing tax by switching income from personal to corporate.
- There are some opportunities for base broadening in New Zealand; policy choices will be required around the best mix of base broadening and statutory rate to maintain/enhance international competitiveness.

Box 1 : Views Shared with Other Treasury Departments

"The global economy has changed markedly over the past half century. Trade and investment flow across borders in greater volume and with greater ease. Increasingly, the ability of U.S. companies to grow and prosper depends on their ability to do business globally. As we look to the future of the U.S. economy and U.S. workers, we must look at our competitiveness through the lens of the global marketplace.

... As barriers to cross-border movement of capital and goods have been reduced, differences in nations' tax systems have become a greater factor in the success of global companies. Recognizing this, many nations have changed their business tax systems.

Source: Approaches to Improve the Competitiveness of the U.S. Business Tax System for the 21st Century, Office of Tax Policy, U.S. Department of the Treasury (December , 2007, p.i)

"... Australia is a small, open and developed country operating in an increasingly globalised world with freer flows of ideas, investment and labour, there is increasing pressure for Australia's tax-transfer system to remain internationally competitive.

The demographic challenge of an ageing population is also profound. As our population ages the proportion of people in the workforce will fall. This has significant implications for economic growth and our future standards of living. "

Source: The Architecture of Australia's Tax and Transfer System. Report of the Australian Treasury's Review of Australia's Future Tax System. (August, 2008, p.xi)

FIGURE 1.1 : Economic Globalisation 1970-2005

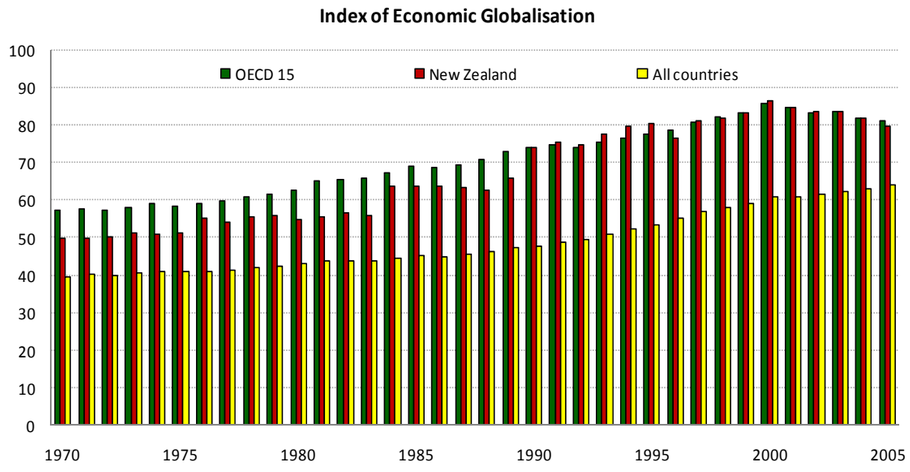
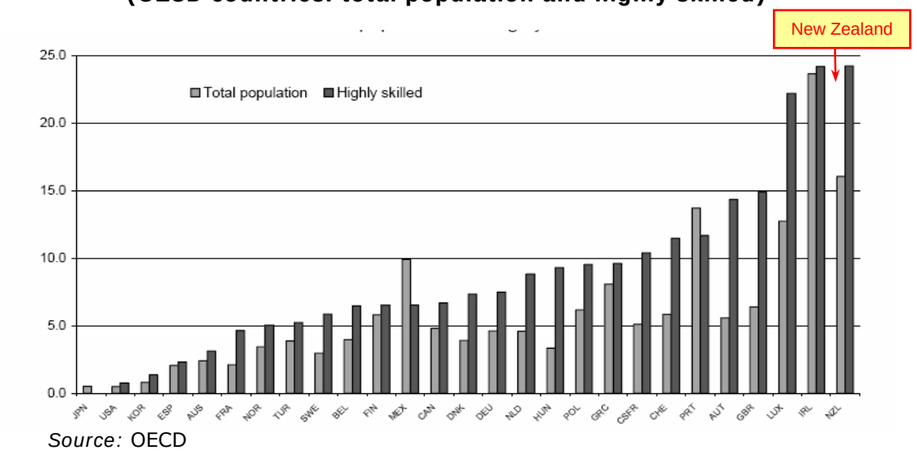


FIGURE 1.2 : Globalisation - Expatriates as % of all native born, 2000 (OECD countries: total population and highly skilled)



Source: OECD

In brief…

New Zealand is often regarded as having a 'good' tax system

But, like other countries, it will need to adapt in future

Medium-term, rather than immediate, reform will be required

Globalisation is on a persistent upward trend

It affects New Zealand capital and labour markets, and will increasingly affects domestic tax choices

1. Introduction

1.1 The Domestic and International Background

New Zealand has traditionally been regarded as having a relatively efficient and 'low distortion' tax system. For example, our consumption tax (GST) and income tax bases are unusually comprehensive (the notable gap being the non-taxation of capital gains). Compared to other OECD members our average personal tax rates are not unduly high for most taxpayers, and we tax from the first dollar of income, which helps take the pressure off more damaging rates further up the income distribution. On the other hand, our company tax rate is above the OECD average. Also our tax-to-GDP ratio is somewhat higher than the OECD average, and relatively high for a country of our income level.

Therefore, despite some weaknesses, the New Zealand tax system has avoided a number of the unhelpful features observed in some other OECD countries. However, there is an emerging concern that the tax system in its current form will serve New Zealand increasingly poorly in future. This is a concern increasingly shared by many OECD countries. The US, Britain and Australia (and OECD Secretariat) have all commissioned recent reviews of their tax and/or welfare-pension regimes so their systems better serve the needs of 21st century globalising economies. **Box 1**, on the facing page, summarises two perspectives: from the US and Australia. This shows that even a large economy such as the US, traditionally less vulnerable to international developments, recognises the need for its tax system to adapt in the face of global change. And Australia, like ourselves, is adapting to global pressures and domestic demographic developments.

In order to meet those challenges the tax system will need to change over the medium-term of the next 5-15 years. This document sets out where we see the main challenges and opportunities for future reform. By and large, we consider that the need for reform is not urgent: there is time to consider and develop a medium-term programme. A programme of consistent, modest, incremental changes will over time significantly enhance the ability of the tax system to contribute to a more productive economy that can meet the income and public spending aspirations of New Zealanders.

1.2 The Drivers of Change in New Zealand

Two key 'driving forces' are likely to affect the shape of New Zealand's tax system over the next 10 years: globalisation and trade-offs implicit within tax policy choices between the efficiency, distributional and revenue integrity properties of the tax system. In addition, beyond the 10-year horizon, the demographic changes - mainly population ageing - projected in many OECD countries will also affect New Zealand with consequences for how we structure our tax and transfer systems.

Globalisation, in the form of increased international competition for goods, capital and labour, is changing the economic landscape in which domestic taxes are set. **Figure 1.1** shows changes in a globalisation index based on measures of international economic integration (trade flows, investment, tariffs etc). More 'open' economies take higher values (max. = 100). New Zealand is more open than the world average but similar to a group of 15 OECD 'comparator' countries. Globalisation is on a persistent upward trend, and though individual countries such as New Zealand can run counter to those trends for a few years (e.g. via reduced trade flows) they generally cannot – or do not - do so for long. Perhaps more than any other OECD country, New Zealand cannot ignore the impact of globalisation on its labour market. **Figure 1.2** shows that around a quarter of skilled New Zealanders now live abroad. As discussed below, trans-Tasman migration in particular is a growing phenomenon.

These trends have consequences for tax-setting: taxes on domestic investment, labour and companies can therefore no longer be set independently of international developments. The penalty for trying to do so is increasingly severe out-migration of corporate and personal tax bases. Setting personal and corporate tax rates independently of each other is also increasingly undermining tax system integrity via tax planning and arbitrage opportunities as well as tax-motivated incorporation.

FIGURE 1.3 : Average Tax Rates in New Zealand

(for individuals at 67%/100%/133%/167% of average wage, AW)

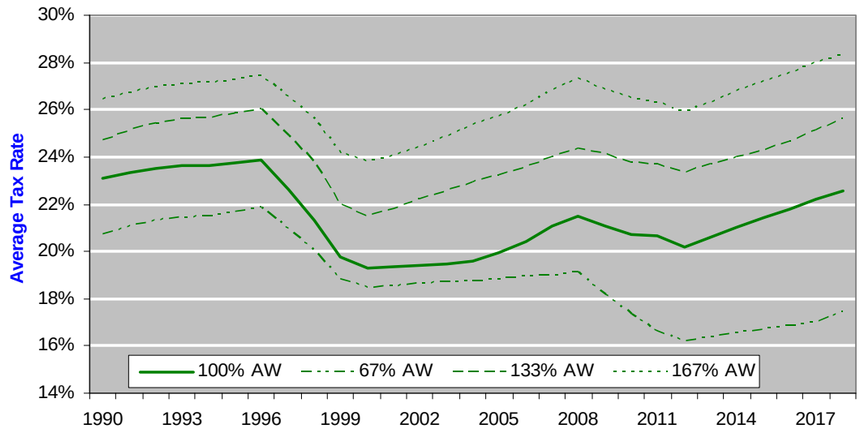


FIGURE 1.4 : Population Ageing – International Comparisons

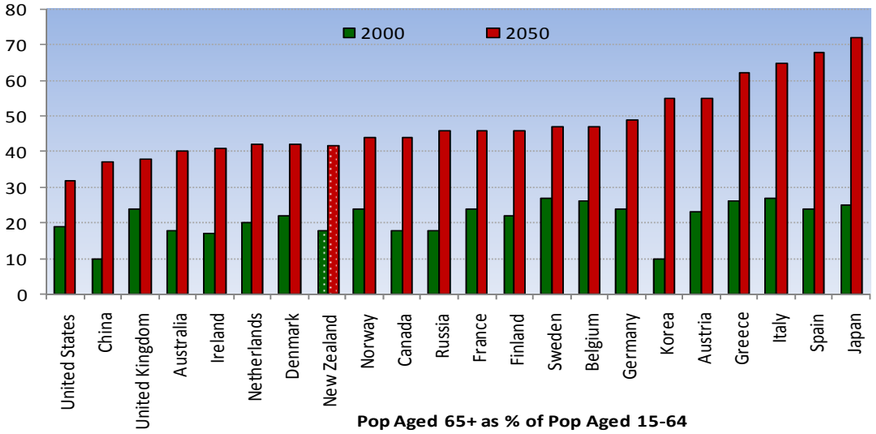
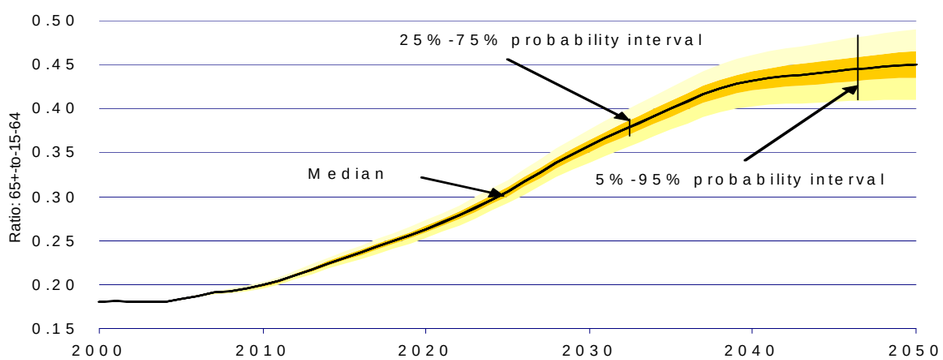


FIGURE 1.5 Population Ageing in New Zealand, 2000-2050



In Brief

Without policy change, fiscal drag will raise ATRs to historical highs

Globalisation & income growth affect the ***mix*** of taxes required to remain competitive

Demographic change will affect the longer-term tax mix

Taxes will need to adapt to: raise revenue efficiently; help achieve equity objectives; & facilitate productivity growth

New Zealand's income tax-to-GDP ratio is higher than Australia's or the OECD average

Future tax policy choices will be critical. For example, without policy changes, fiscal drag associated with the non-indexation of tax thresholds means that income growth pushes up individuals' average tax rates (ATRs). **Figure 1.3** shows how, between periods of tax reform that cut personal tax rates (the late 1990s and 2008-11), fiscal drag persistently raises all taxpayers' ATRs. Without further reform, many taxpayers will face ATRs at 20-year highs by 2018, even with the 2008-11 tax cuts. As we detail below, such increases in ATRS and MTRs are likely to exacerbate existing tax-planning trends, worsen the diversion of investment and savings into tax-favoured vehicles and widen the wage gaps that encourage trans-Tasman migration.

These pressures have become evident in New Zealand in the last decade or more, in response both to globalisation factors and policy choices.
To deal with these trends over the medium-term, NZ is likely to have to:

- reform personal and corporate tax settings to make them more internationally competitive;
- shift the tax system away from tax bases that are internationally mobile, such as labour and capital, and towards bases that are less mobile, like property and land.

Demographic change is a slow process but will increasingly impact in New Zealand, as elsewhere in the OECD. **Figure 1.4** shows that though our demographic ageing over the next 40 years is modest compared to some OECD countries, this still involves a doubling of the ratio of over 65s to the 15-65 age group from 20% in 2000 to over 40% by 2050. **Figure 1.5** shows how, for New Zealand, this demographic ageing is projected to become especially rapid around 2020/2025. This implies changes to the ratio of income tax to other taxes over the longer-term as pensioners can be expected to earn lower incomes but spend a greater fraction of that income.

These 'drivers of change' suggest that, unless our tax systems adapt over the next decade or so, we expect future developments will:

- significantly undermine tax *efficiency*;
- threaten the system's *revenue-raising* capacity;
- change the way public expenditures and taxes are used to achieve *equity* objectives in the face of these global and domestic challenges.
- make it harder for New Zealand to compete internationally for capital, labour and new technology, undermining New Zealand's productivity performance.

1.3 In Outline …

The following sections identify what we believe are the key aspects of the tax system that need attention in the medium-term, and propose some policy changes to deal with them. In summary:

Section 2 - identifies a number of key characteristics of New Zealand's tax system from an international perspective;
Section 3 – examines the impact of taxes on overall economic performance;
Section 4 – focuses on recent and future changes in personal income taxes;
Section 5 – examines the impact of globalisation and tax-planning on corporate taxes;
Section 6 – presents some options for reform to deal with anticipated medium-run problems with the existing tax regime;
Section 7 – draws some conclusions.

2. New Zealand's Taxes in International Context

Is New Zealand a high-tax or low-tax country? There are various ways to measure this. For a person on average wages, international comparisons often suggest New Zealand is a relative low income tax country (when other countries' social security taxes are included). Average taxes are low, especially for families. However, such comparisons cannot capture the variety of relevant circumstances such as household composition, inclusion of tax credits etc.

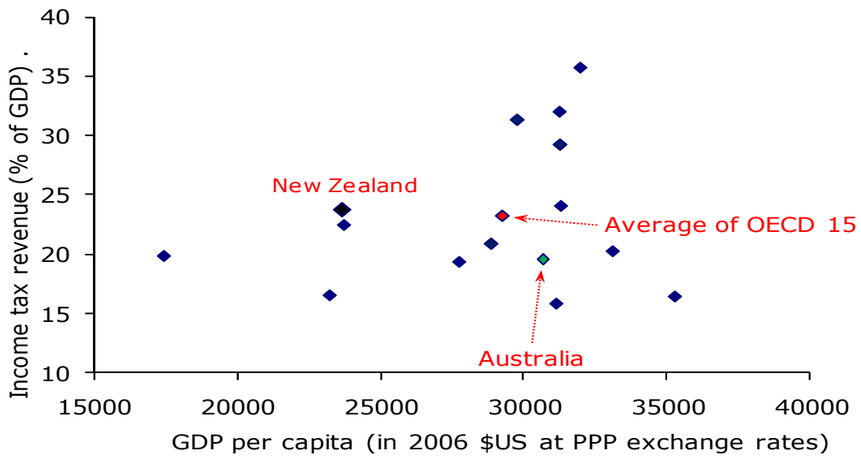
A more general 'average' measure is shown in **Table 2.1**. This shows the amount of revenue

TABLE 2.1 : Tax Revenues, 2005 (as % of GDP)

	New Zealand	Australia	OECD
Income & profit taxes:			
Income tax	**15.5**	12.3	9.2
SSC: employee	-	-	3.0
SSC: employer	-	-	5.4
Profit tax	**6.3**	5.9	3.7
Other	**2.0**	1.4	1.0
Total	**23.8**	19.6	**22.3**
Consumption taxes	12.1	8.6	11.4
Property Taxes	1.9	2.7	1.9
Grand Total	**37.8**	30.9	**35.6**

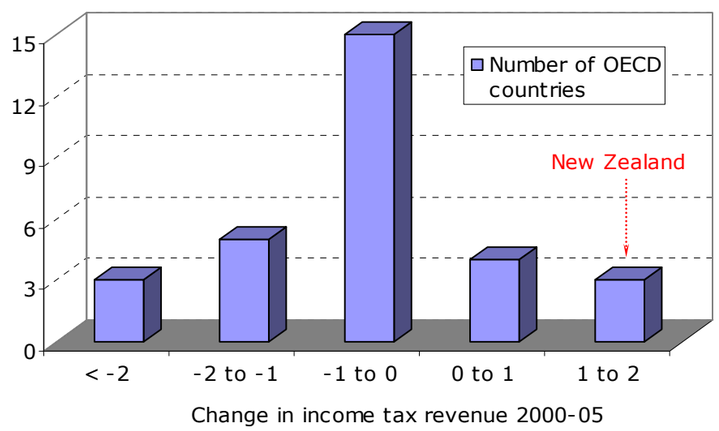
Source: OECD Revenue Statistics, 2007.

FIGURE 2.1 : Income Tax Revenue versus GDP per capita (OECD countries, 2005)



Source: OECD Revenue Statistics, 2007.

FIGURE 2.2: Changes in Income Tax/GDP, 2000-05 (in percentage points)



In brief…

Our personal income taxes are biased against capital

Relative to comparable countries, our income tax/GDP ratio is relatively high

The recent level & growth of income tax revenue in New Zealand is high by OECD standards

Ratios of corporate & consumption taxes to GDP are above OECD averages

New Zealand's reliance on property taxes in total revenue is relatively low.

collected from different taxes as a ratio of GDP. Comparisons with the OECD on average, and Australia, suggest that our revenues collected from income taxes are about, or above, the OECD average, and greater than Australia's. (Australia and NZ's use of tax credits to deliver social assistance tends to depress apparent income tax revenues compared to other OECD countries).* However most OECD countries collect a significant fraction of their direct taxes from social security/payroll taxes levied on employment. These average around 8% of GDP in the OECD, and only apply to employment income. Because New Zealand does not levy such payroll taxes, but instead collects more revenues from personal income taxes, this means that both capital and labour income are taxed at these higher personal rates. In the UK, for example, an average wage earner would face a marginal income tax rate of 20%, plus a social security tax rate around 11%, on their earned income. But only the 20% rate applies to interest income. In New Zealand the comparable rate is 33% and applies to earned and interest income. We would **not** advocate the introduction of a social security tax in New Zealand, but it is noteworthy that our tax rate on all personal income is comparable to other OECD countries' tax rates on labour income.

Income taxes and income levels: Just as individuals are generally willing and able to pay a higher proportion of their income in taxes when their income is higher, so countries with higher average incomes tend to have larger ratios of tax revenues to national incomes. New Zealand is one of the lower income OECD countries (GDP per capita ranks 21 out of 30 OECD countries), so might be expected to have a lower tax/GDP ratio. **Figure 2.1** shows how New Zealand compares (in 2005) with 15 OECD countries most readily comparable with New Zealand.** This shows that, of the 15 countries, NZ has the 3rd lowest per capita income but the 6th highest ratio of income taxes to GDP (including taxes on profits and social security). Our ratio is especially high relative to Australia, despite its higher per capita income.

The growth in the income tax 'take' in New Zealand has also been unusually rapid since 2000. **Figure 2.2** shows the number of OECD countries (vertical axis) experiencing different changes in their income tax/GDP ratios from 2000-05 (horizontal axis). New Zealand is one of only three countries where this ratio increased by more than 1 percentage point over the 5 years. This likely reflects the direct impact of the introduction of the 39% rate, and its indirect effects as strong cyclical growth and fiscal drag push more taxpayers into the 39% (and other) brackets. For example, we estimate that in 1999/2000 about 170,000 full-time workers earned more than $60,000 per annum. By 2008/09 this had risen to 460,000, an increase of over 170%.

Corporate & consumption taxes: Corporate profit taxes are probably best thought of as incident on individuals (especially with imputation regimes such as in Australia and New Zealand). This tends to make New Zealand's total personal income taxes (including corporate) look higher. Perhaps surprisingly, despite our relative low rate of GST (12.5%), its broad base plus other excise revenues put New Zealand above the OECD average for consumption tax revenues in relation to GDP.

The Tax Mix: New Zealand's ratio of indirect-to-direct taxes is not out of line with the OECD average: **Table 2.2** shows that the share of goods and service taxes (GST plus excises) in total tax revenue is around the OECD average of 32%. Where the mix of taxes differs from the OECD on average, and Australia in particular, is the mix of *direct* taxes – New Zealand has a higher share of income & profits tax and a lower property tax share. As is discussed further below, recent OECD and other research suggests that different taxes have quite different impacts on economic growth. In the ranking of growth impacts, corporate and personal taxes tend to be the largest (most negative) and consumption and property taxes the lowest. New Zealand's tax structure may therefore be contributing to its lower GDP performance over the medium-run.

* The tax-expenditure component (but not the transfer component) of New Zealand's family tax credits are excluded from OECD income tax statistics.

** Australia often compares itself within an 'OECD 10' sample of Australia, Canada, Ireland, Japan, the Netherlands, New Zealand, Spain, Switzerland, UK, US; see Australian Tax Review (2008, p.203). To these we have added the 'small, open' economies of Austria, Belgium, Denmark, Greece, Portugal and Sweden, and removed the US. Within the 'OECD 10' New Zealand has the lowest GDP per capita but 2nd highest income tax ratio.

TABLE 2.2 : Tax Revenues Shares, 2005 (% of total tax revenue)

	Income & Profits	Social Security	Payroll	Property	Goods & Services	Other	Total
New Zealand	**63.0**	**-**	**-**	**4.9**	**32.1**	**-**	**100**
Australia	59.1	-	4.5	8.7	27.8	-	100
OECD Ave.	35.3	25.4	0.9	5.6	32.0	0.7	100

Source: OECD Revenue Statistics, 2007.

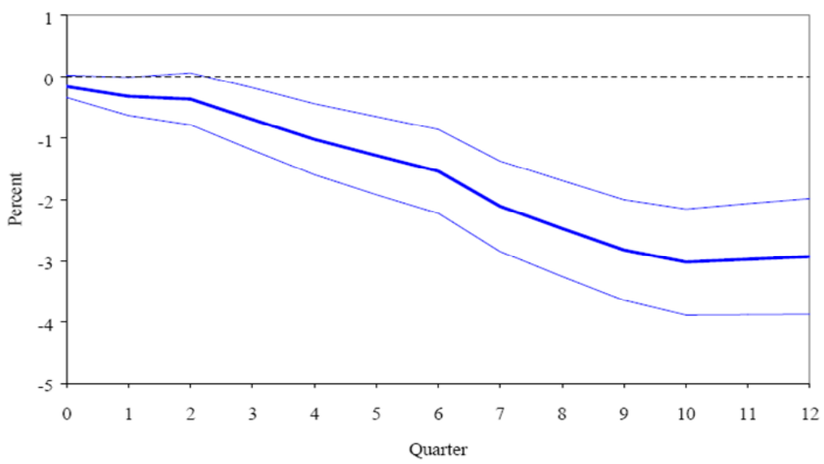
TABLE 3.1 : Recent Studies of Taxes and Growth

OECD	US	New Zealand
Bleaney et al (2001)	Li & Sarte (2004)	Branson & Lovell (2001)
Widmalm (2001)	Bania et al (2007)	Claus *et al* (2006)
Padovano & Galli (2002)	Romer & Romer (2007)	Dungey & Fry (2008)
Lee & Gordon (2004)	Reed (2008a, b)	
Angelopoulos *et al* (2007)		
Romero-Avila & Strauch (2008)		
Dhont & Heylen (2008)		
OECD (2008)		
Arnold (2008)		

See **References** at end for details.

FIGURE 3.2 : Impact on US GDP of Exogenous Tax Increase of 1% of GDP

Panel (a) Estimated effects and one standard error bands



In brief…

A growing literature confirms short- & medium-term effects of taxes on growth

There is new evidence from the OECD…

High tax rates distort several key private sector economic decisions

For each $2 of private output the government takes $1

Taxes affect growth quickly and persist for several years, at least

Long-run effects (20+ years) are hard to test for

US evidence of tax-growth effects is strong. NZ evidence is supportive

3. Taxes and Economic Performance

An enduring fiscal challenge is balancing the benefits of expenditure against the costs of taxes. Taxes, along with public expenditure and debt levels, are known to affect the level and growth rate of GDP. This can occur via impacts on investment decisions (to accumulate physical and human capital) and via productivity improvements. There is now little dispute regarding the empirical validity of these effects in OECD countries. The debate now focuses on (i) quantitative magnitudes; (ii) which taxes are worst for growth; and (iii) how long these effects last. Evidence from a variety of sources increasingly supports the argument that increases in particular taxes are harmful for growth performance in the short- and medium-term, while increases in certain types of public expenditure – such as infrastructure – enhance GDP growth performance.

Until recently much of this evidence has been gathered at the macroeconomic level for individual, and groups of, OECD countries. This year, however, OECD (2008) reported on the results of a major research exercise which has looked at more micro-level links between taxes and growth – how firms' and industries' investment and productivity are affected by different taxes. Both approaches are summarised below.

It should not be surprising that taxes affect GDP.

- Firstly, economic theory has established various channels by which this can occur. Almost all taxes involve distortions to individuals', households' or firms' decisions such that after-tax returns from earning income or investing in particular activities are reduced below their pre-tax equivalents. Lower returns imply lower incentives to invest in work, physical or human capital (education, skills).
- Secondly, with tax revenue (and public expenditure) accounting for around 30-50% of GDP in most OECD countries, it is to be expected that both the direct compositional effect of this (via public sector productivity), and indirect effects (via incentive effects) on GDP could be large. That is, if the government attempts to extract tax (and then spends it) it would not be surprising if the private sector reacted to minimise its tax liability in ways that detract from overall economic performance.

3.1 Macro Evidence

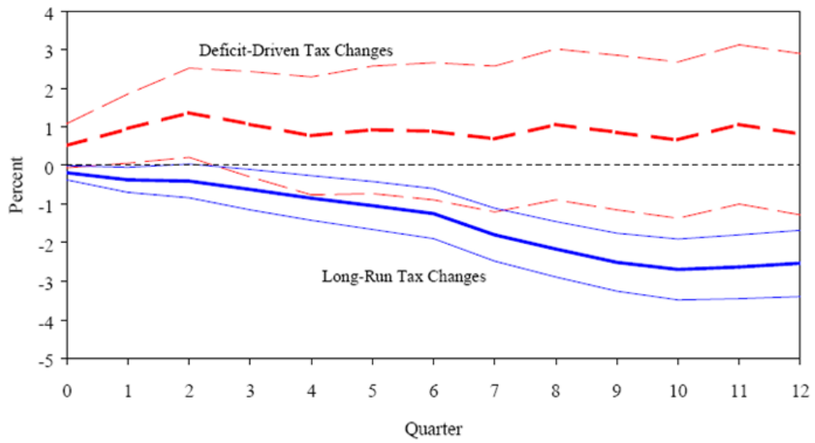
Recent macroeconomic evidence includes an array of studies examining OECD countries, the US and New Zealand – see **Table 3.1**. These studies increasingly support the view that there are significant growth effects of tax changes over an initial short-run (5 year) period. Studies that look beyond 5 years generally find these effects persist at least into the medium term (10-20 years). This means that, following a tax reduction equal to, say, 1% of GDP, the future level of GDP can be expected to be higher than it otherwise would. Being precise about the magnitudes is difficult, and likely to be country-specific and determined by the *type* of tax change considered. However, most studies estimate GDP to be several points higher over the medium term with much of this effect happening relatively quickly.

Longer-term impacts on growth are typically difficult to observe because this requires very long time-series data. However, if economic growth is sensitive to the accumulation of human capital skills, for example, these effects might be expected to be observed primarily after a relatively long lag. To the extent the tax system affects education and skill-acquisition decisions it may therefore have long-term growth effects. There is some evidence for this from a number of OECD countries (Trostel, 1993; Kocherlakota and Yi, 1997a, b).

Figure 3.2 provides an illustration of the magnitude of tax-growth effects for the United States (from Romer & Romer, 2007). Since changes in GDP affect tax revenues, as well as vice versa, these authors have carefully removed the former effect in order to identify the growth impact of tax changes (mainly Federal income tax). Panel (a) of **Figure 3.2** shows the estimated effects on GDP (with 1 standard error bands) of a tax increase of 1% of GDP. These indicate effects on GDP building up to around -3% of GDP after 3 years. These effects appear to be sustained thereafter. Panel (b) of **Figure 3.2** shows that the impact of tax changes depends on the 'driver' of tax changes – e.g. to finance increased public spending or reduce deficits. The 'deficit-driven tax changes' line in **Figure 3.2** shows that where tax increases were motivated to reduce inherited

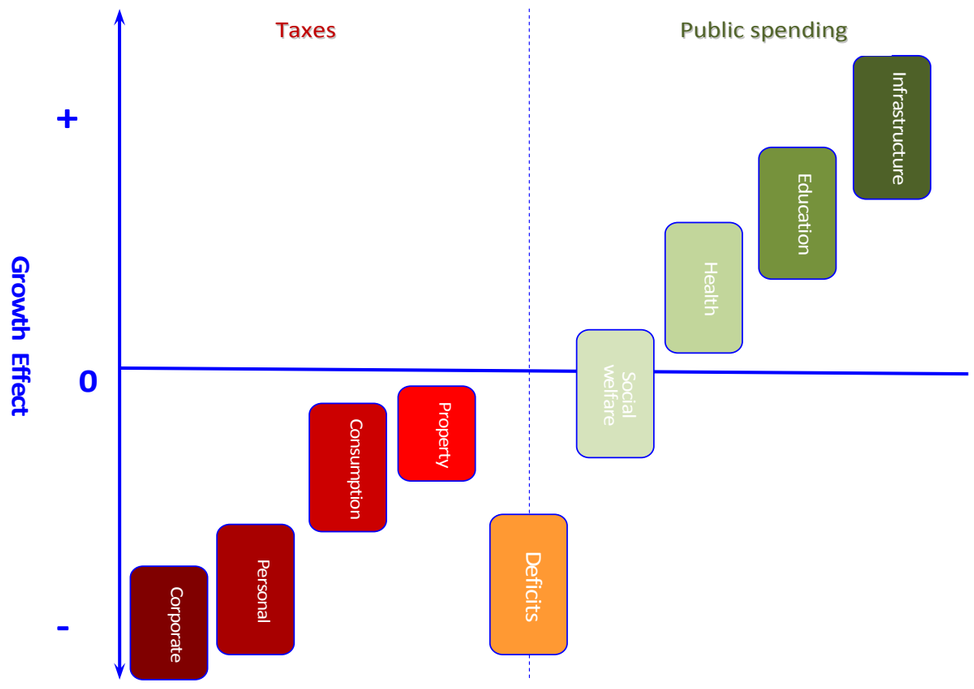
FIGURE 3.2

Panel (b) Estimated effects (with 1 s.e. error bands) for long-run exogenous tax changes (blue) and changes to deal with previous budget deficits (red)



Source: Romer and Romer (2007)

FIGURE 3.3 : Effects of Taxes & Public Spending on GDP Growth



In brief…

The type of taxes levied matters for growth

Greater use of progressive income and corporate taxes harm growth in OECD countries

Firms' investment is reduced when corporate tax raises their costs

Firm-level TFP responds to higher corporate tax rates but R&D tax credit effects on TFP are small

deficits, the adverse growth impact of tax increases is largely removed. That is, increasing income taxes or deficits are similarly damaging to economic growth.

A number of recent macro-level studies, including OECD(2008), support the following conclusions:

- The structure of taxation matters for medium-term growth; that is, increasing some taxes is more harmful than others – it is the marginal or average rates of specific taxes, rather than tax/GDP levels overall that harm growth most.
- In ranking tax-growth effects, income taxes are most damaging (*possibly* corporate income taxes in particular) while consumption and property taxes are least damaging.
- The type of public expenditure funded by tax increases affects the overall fiscal-growth impact; infrastructure and education spending appear to be most growth-enhancing.
- Personal income tax progressivity appears to adversely affect GDP levels. OECD (2008) find that a fall in the marginal tax rate faced by a worker on the average wage of 5 percentage points (from the OECD average of 26%) is estimated to raise GDP per capita by around 1% over the medium-term (10+ years).
- Both investment and TFP are adversely impacted by tax increases.

Though it is difficult to put precise numbers on the growth impacts of taxes, deficits and public spending, there is an emerging consensus on the relative magnitudes. These are shown diagrammatically in **Figure 3.3**.

3.2 Micro Evidence

OECD (2008) reports on recent evidence across firms/industries in a number of OECD countries (NZ not included). This micro data was used to examine the impact of taxes on investment and on total factor productivity (TFP).

Effects on investment were examined by estimating how firms' investment changed in response to a change in the after-tax user cost of capital (UCC: the after-tax cost of undertaking each $1 of investment). OECD (2008) estimated long-run responses of investment to this net-of-tax user cost in the range: -1.0 and -0.35 (a 1% increase in the UCC reduces investment by up to 1%) from industry data, and -0.7 from firm-level data. A fall in the corporate tax rate from 35% to 30% is found to reduce the user cost of capital by 2.8%, increasing investment by around 2%. The effect is found to be larger in more profitable sectors, i.e. those with larger tax bases.

Estimated effects on TFP indicate that:

- Top rates of personal income tax, social security contributions and corporate taxes all adversely affect TFP; they discourage entrepreneurship and firm entry; see also Gentry & Hubbard (2000, 2004).
- R&D tax incentives are found to affect TFP mainly where R&D intensity is high, but estimated effects are small. Raising R&D incentives by 5 cents per $ invested raises TFP growth by 0.01 percentage points.
- Lower TFP is associated with firms in sectors that have a combination of higher profitability and where corporate tax rates are higher.
- Reducing the corporate tax rate from 35% to 30% is estimated to increase long-run TFP growth by 0.4 percentage points - for firms in the sector with median profitability compared to the lowest TFP levels. At the aggregate level, TFP growth in OECD countries averaged around 1.1% over 2000-2005. This result is surprisingly large and should be treated with caution until corroborated in other studies.

Overall these results suggest that both personal and corporate income taxes have affected investment incentives and productivity growth in OECD countries in recent years. Although New Zealand is not included in the sample studied, there is no reason to think that similar processes would not operate here. In the next sections we examine the evidence on the effects of personal and corporate taxes on both revenue sustainability and tax efficiency – both aspects that influence economy-wide efficiency, investment and productivity growth.

FIGURE 4.1: MTRs for Income Tax, 1990 - 2018

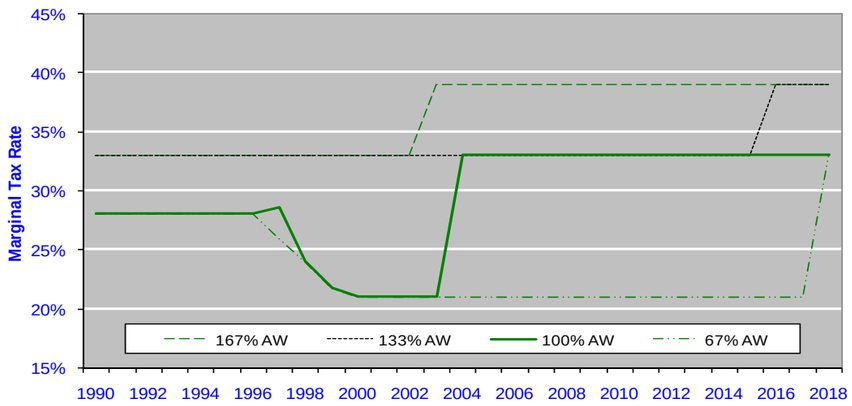


FIGURE 4.2: MTRs for Income Tax including WfF, 2000 - 2018

FIGURE 4.3: EATRs for Primary & Secondary Earners

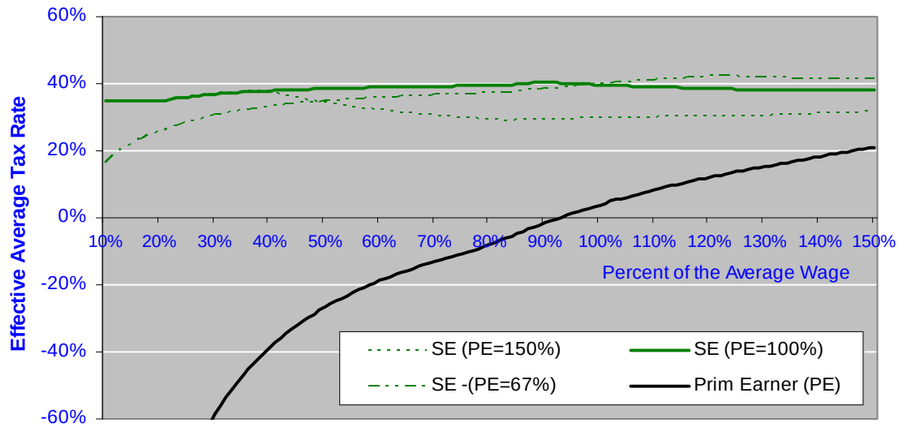


FIGURE 4.4 : Effective MTRs for Primary and Secondary Earners

In Brief…

Personal taxes involve a fundamental trade-off: high MTRs help redistribution but create inefficiencies

Tax-induced distortions arise from high MTRs or ATRs and differences in these across income sources

Expect worsening labour force participation, emigration, & poor investment choices

Fiscal drag is pushing up ATRs & MTRs

WfF abatement makes effective MTRs much higher

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4. Personal Taxes & Transfers

Individuals earn different 'types' or sources of income. It is useful to categorise these into labour income (e.g. wages & salaries); and capital income (e.g. interest, dividends, rent, capital gains). In addition, all OECD countries tax some capital income – in the form of profits – via corporate taxes (discussed separately below). New Zealand and Australia are unusual in treating this as a 'pre-payment' of personal taxes – via imputation credits.

Because personal income taxes, unlike corporate taxes, are levied *directly* on individuals,[2] they are typically set with increasing marginal rates (MTRs) to help meet *redistributional objectives*, though their contribution to redistribution overall is often limited. This also applies to social assistance transfers such as Working for Families, which involve negative effective marginal tax rates. This creates a fundamental trade-off between the redistributional benefits of high or variable MTRs and the 'cost' of the associated distortions to taxpayers' behaviour that harm economic efficiency.

Tax-induced distortions arise from:

- *High* tax rates on an income source, which acts as a disincentive to earn that form of income (e.g. via capital or labour supply responses within NZ; out-migration from NZ).
- *Differences* in tax rates applicable to different sources of income which cause investment and tax-planning responses to divert income towards tax-favoured forms. As a result, investment may be diverted into high post-tax return vehicles even though pre-tax returns are higher elsewhere. This reduces returns to the NZ economy as a whole.

Major concerns for New Zealand's personal taxes and transfers in recent years and over the next decade or so are:

(A) High and increasing tax rates via:
- MTRs for many taxpayers that discourage labour supply and skill acquisition and encouraging tax planning and avoidance.
- ATRs, both absolute level and relative to Australia - that discourage individuals from entering the labour market and/or encourage emigration.

(B) Differences in tax treatment of different forms of capital income that bias investment choices towards more tax-favoured, and probably lower productivity, alternatives.

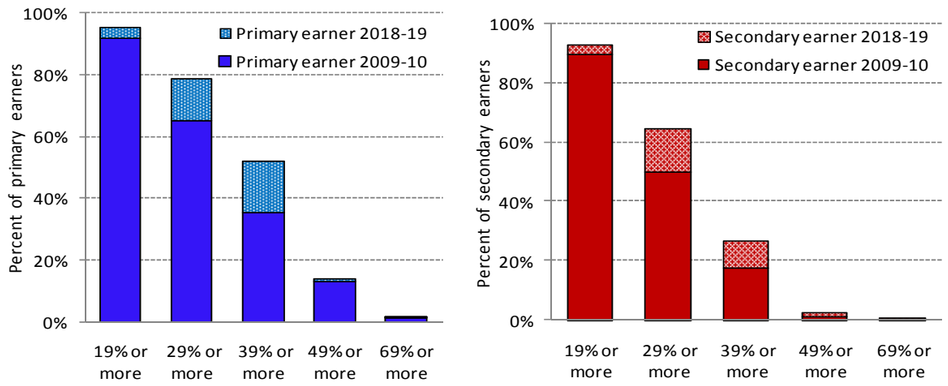
Sub-sections 4.1 & 4.2 below present evidence on each of these three in turn. Sub-section 4.3 then considers equity aspects.

4.1 High and Increasing MTRs & ATRs

Figure 4.1 shows the impact of income growth and policy changes since 1990 on the MTRs of income tax faced by individuals at 67%/100%/133%/167% of average wage (in each year). This shows that, after tax reductions in the 1990s that reduced the MTR to 21% for someone on average wages, in 2004 this rose to 33% while those on 167% of the average wage faced the 39% rate from 2003. Future projections (based on Treasury economic forecasts) suggest that someone on 133% of the average wage will face the 39% rate in 2016 (this would have occurred at 100% of the average wage without the tax package announced in Budget 2008). Someone on only 67% of average wage will face the 33% MTR within 10 years.

Income tax MTRs tell only part of the MTR story because families with children face abatement of Working for families (WfF) when family income exceeds around $36,000. This applies at 20c per $ (formerly 30c per $). When WfF is included **Figure 4.2** shows that for some groups much higher effective MTRs have applied since around 2006 – typically in the 53-59% range. An average wage earner receiving WfF now faces an effective MTR of at least 53%. For lower income taxpayers however, the increased abatement-free zone of WfF has lowered MTRs to 21%.

Table 4.1 below compares the 'tax take' at the margin for New Zealand with other OECD countries (the UK and Australia have similar family tax credit systems). The table shows how a 1% increase in earnings translates into a percentage increase in 'net' income – after taxes, social security contributions and family transfers. A value of 1 implies that an x% increase in wages



Source: Household Expenditure Survey (HES) & Treasury's micro-simulation model

FIGURE 4.5 : Wage Gaps and Migration, 1990-2008

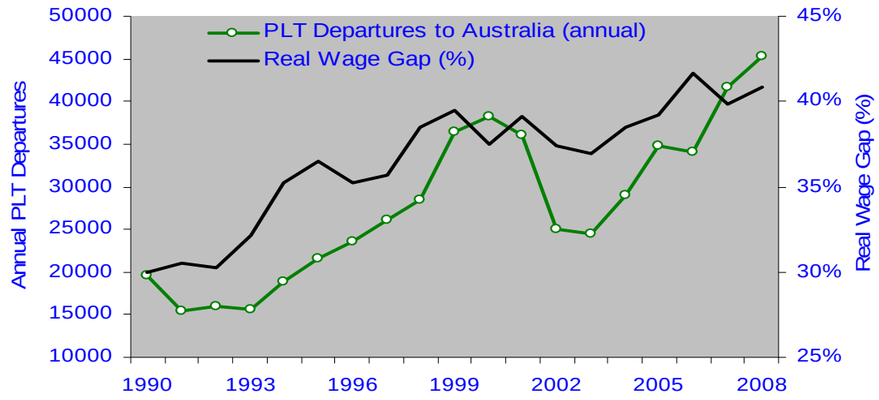


FIGURE 4.6 : Income Tax in Australia & New Zealand since 1999/00

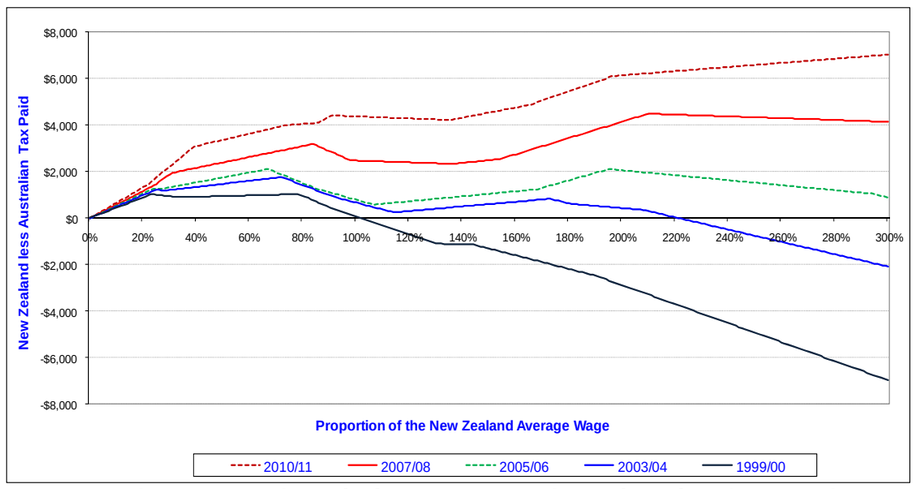


FIGURE 4.7 : Correlations Between Out-Migration & Wage Gaps

Couples with children face especially high effective MTRs

would produce an x% increase in after-tax wages; that is, the tax is proportional. It can be seen, for example that a 1% increase in earnings for a single person on 67% of the average wage and with no children yields a 0.8% of net income in Australia, almost 1% in NZ and 0.88% in the UK. Overall, the table reveals that NZ is similar to the other OECD countries for families without children but for married couples with children MTRs are especially high – after tax they are left with around 0.2-0.3% less of each additional 1% earned than in the OECD on average.

TABLE 4.1 : Change in Net Income For 1% Increase in Gross Earnings

Family type :	single	single	single	single	married	married	married	married
ch = children	no ch	no ch	no ch	2 ch	2 ch	2 ch	2 ch	no ch
Wage level (% of average):	67	100	167	67	100-0	100-33[2]	100-67[2]	100-33[2]
Australia	0.80	0.89	0.82	0.51	0.54	0.80	0.47	0.85
New Zealand	**0.98**	**0.85**	**0.84**	**0.68**	**0.48**	**0.53**	**0.57**	**0.84**
United Kingdom	0.88	0.92	0.85	0.32	0.84	0.83	0.78	0.88
OECD Average	**0.85**	**0.85**	**0.86**	**0.69**	**0.73**	**0.77**	**0.77**	**0.83**

1 Net income is calculated as gross earnings minus personal income tax and employees' social security contributions plus family benefits. The increase reported in the Table represents a form of elasticity. In a proportional tax system the elasticity would equal 1. The more progressive the system at these income levels, the lower is the elasticity.
2 Two-earner family. Assumes a rise in gross earnings of the principal earner in the household.

Effective ATRs are especially high for secondary earners

Figure 4.3 shows effective average tax rates (of income tax plus WfF) for individuals on different percentages of average wage (in 2008). This is shown for both primary and secondary earners in a household with two children. Three secondary earner cases are shown (for a primary earner on 67%, 100% & 150% of AW, where AW = $45,800). The figure shows that, due to WfF, ATRs for primary earners are negative (i.e. in net terms they receive, rather than pay, income tax) up to about average wages (100%AW). However, because secondary earners MTRs are generally high, their *average* tax rates are typically much higher than their primary-earning partners: typically in the 30-40% range even when earnings are low.

What is the evidence that these high MTRs/ATRs are harmful?

Large fractions of taxpayers pay these high MTRs

(1) Large numbers of taxpayers are affected. **Figure 4.4** shows estimates of the number of primary and secondary earners paying different rates in 2008/09 and projections for 2018-19 (based on 2008-09 tax settings). These numbers probably under-estimate the number of taxpayers for whom these rates are relevant since an unknown number will have responded by changing their earned or declared income to avoid them. Of particular interest are those paying an effective MTR of 39% or more. For income tax alone, this has risen from around 5% of all taxpayers in 2001 to around 14% in 2008-09. However the figure shows that, including WfF, around **35**% of all primary earners will face MTRs ≥ 39% in 2009. Many of these will be taxpayers facing a 33% income tax MRT plus 20% abatement of WfF. This is expected to rise to over **50**% by 2018. For secondary earners the equivalent numbers are **18**% (2009) & **27**% (2018). Thus, without policy change, fiscal drag pushes many more taxpayers into 33%/39% tax brackets.

High MTRs are encouraging increasing levels of tax-planning

(2) Extensive evidence of tax-planning to minimise exposure to high MTRs. Tax-planning responses arise in part because of a progressive structure of tax rates causing incentives to hide income or income-split in order to be taxed at lower rates. (Tax-planning is also encouraged where different types of income and investment vehicles are taxed at different rates: see sub-section 5). There is increasing evidence that the current NZ structure of personal tax rates is inducing substantial tax-planning that is undermining the revenue integrity and efficiency of the system. For example, IRD data reveal:

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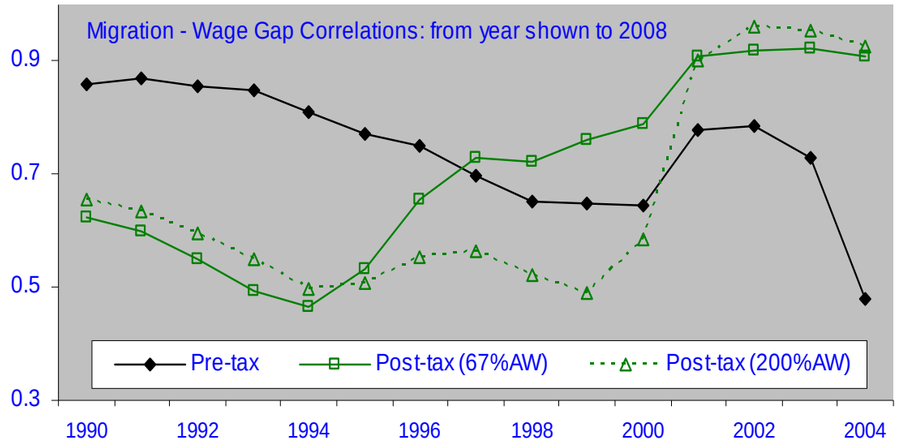
- Increasingly large 'spikes' in the taxpayer income distribution at personal incomes around $38k and $60k, with equivalent 'troughs' immediately above those values;
- The growth in the use of Trusts, and in the payment of income from Trusts: in the six years since 2001 Trustee income has increased by 400% while Beneficiary income has risen by only 50%. This effectively allows high earners to be taxed at 33% instead of 39%.
- The numbers of taxpayers with income in excess of $100k has grown much more slowly since 1999 compared to before 1999, yet this is not the case for taxpayers with incomes



Overall NZ's labour force participation is high but tax can still affect particular groups

Australian evidence suggests recent reforms there will encourage labour supply

TABLE 4.3 : Rates of Tax on Alternative Investments (for 39% MTR Taxpayer)

Type of Investment	EMTR	Comment
Investment Rental Property	< 0% to 39%	Depends on gearing and capital appreciation
Owner-Occupied Housing	0%	No tax on imputed rent or capital gain
Australian Company	17% **	Assumes historical average of 9% annual returns; 4% dividend payout taxed at 39%; 5% capital gain (0% tax)
Foreign Company (not Australian)	22% **	Assumes historical average of 9% annual returns (deemed 5% return taxed, 4% remaining gain tax-free)
PIE	30%	(19.5% for lower income taxpayer)
NZ Company	30% or 39%	39% payable upon distribution
Trust	33% or 39%	33% for Trustee income 39% for Beneficiary income
Qualifying Company/LAQC	30%: income 39%: losses	Income taxed at 30%*; losses passed through to LAQC shareholders, deducted at 39%
Directly-held debt	39%	e.g. interest income (banks)
Human capital	39%	i.e. earned income

* there may be a claw back on payment of dividend to high marginal rate recipient but also potential to pass through gains through payment of tax-free dividend.
** This ignores any foreign tax liability.

FIGURE 4.8 : Summary of Investment/Income Tax Rates (for 39% personal MTR)

Migration to Australia and Aus-NZ wage gaps tend to move together

The post-tax wage gap has grown faster that the pre-tax gap

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less than $100k. This could indicate the out-migration of some higher income earners and/or tax-planning (e.g. within a household) to keep individuals below higher tax thresholds.

- International and New Zealand evidence suggests that high income earners react strongly to high MTRs by reducing or diverting their taxable income into low-taxed forms (see Saez, 2004; Brewer et al, 2008).

(3) Labour force participation is affected. **Table 4.2** shows that New Zealand's labour force participation rate is high relative to the OECD average and is comparable to Australia's. Relative to the OECD, both countries' participation is especially high among women and those under age 24 or over age 55.

Table 4.2 : Labour force Participation Rates, 2007 (as % of persons aged 15-64)

	All	Men	Women	Age: 15-24	Age: 25-54	Age: 55-64
New Zealand	**78**	**85**	**72**	**65**	**84**	**73**
Australia	76	83	69	71	83	58
OECD Average	71	81	61	49	81	56

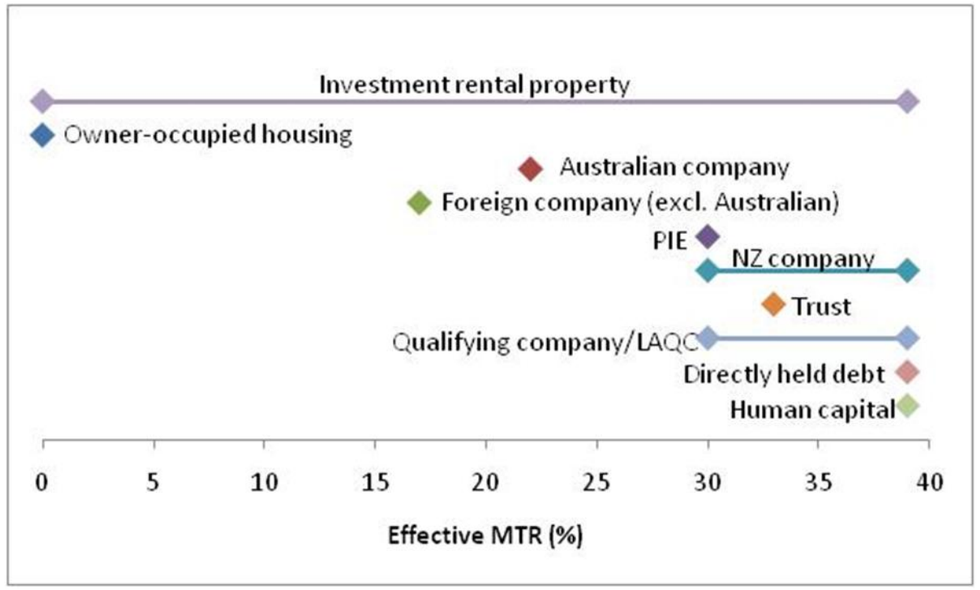
Source: OECD Employment Outlook, 2008.

This evidence would tend to suggest that high MTRs/ATRs are not seriously damaging participation, at least compared to other OECD countries. However, it is known that within the overall participation figures, particular groups of taxpayers, such as secondary earners & single parent households, have low participation rates but are relatively responsive to tax rates. Estimates of tax responsiveness for New Zealand are not available but for are available for Australia (which has similar participation rates). The recent tax changes there were estimated to encourage a significant increase in participation mainly in the form of new labour market entrants.

(4) High ATRs/MTRs may affect migration decisions, especially trans-Tasman. There is little direct evidence on this – data on migrants wages or other characteristics are often absent or unreliable. However, available evidence is suggestive of: (a) trans-Tasman wage differences matter for long-term migration to Australia; and (b) the tax component of the (post-tax) wage gap has increased in recent years as migration trends reveal greater out-migration. More generally, the NZ labour market is unusually internationalised by OECD standards. **Figure 1.2** showed that about one-sixth of all NZ-born, and about one-quarter of highly skilled NZ-born, live overseas. In addition, about one-quarter of NZ residents are foreign-born.[3] Good tax design will in future need to consider the challenges posed by growing international labour mobility. This high mobility means that location decisions, and the effect of tax on those decisions, become increasingly economically significant. Although few migrants dwell for long on tax system design, tax is strongly implicit in broader decisions, such as through assessments of relative standards of living and reports from contacts in the destination country. For example, a survey of expatriate Kiwis working in accounting and finance identified a small effect from 'the tax system', but also identified salaries and career opportunities as the biggest (of 26) factors drawing them overseas.[4]

Figure 4.5 confirms a substantial trend increase in permanent and long-term (PLT) departures to Australia from 1990 to the present but with a sharp temporary drop in 2001/02 (when Australia limited New Zealanders' access to Australian welfare payments). The gap in real average wages between Australia and NZ reveals a similar pattern – rising for most of the period. The data (over 1990-2008) suggest a simple contemporaneous correlation between the wage gap and PLT migration of around 0.8 – though care must be used in interpreting this. [5]

Figure 4.6 shows how income tax paid in New Zealand and Australia has changed over the years, by comparing tax liabilities at different fractions of the average wage (AW) in New Zealand in each year, using PPP exchange rates to convert Australian wages. This reveals that, whereas in 1999 those in excess of 100%AW paid less tax in New Zealand, by 2003-04 this exceeded 220%AW. Since then, the additional tax paid by New Zealanders has generally risen at all wage levels and, with projected changes in the two countries' income tax regimes, is expected to continue to 2010-11.



The post-tax wage gap appears especially correlated with out-migration in the last decade

There is some evidence that PLT migration departures to Australia may be related to pre-tax and post-tax wage gaps. **Figure 4.7** shows correlations between migration and wages where these have been calculated for various years until 2008: 1990-2008, 1991-08, 1992-08 etc. This shows the extent to which the observed correlations depend on inclusion of the early years. (Perfect correlation = 1; no correlation = 0). The black line in **Figure 4.7** shows that, whatever period is chosen, the correlation between pre-tax wages and PLT migration is high - around 0.7 to 0.9 - but generally falls as earlier years are excluded.

Correlations with post-tax wage gaps (individuals on 67%AW & 200%AW are shown) are weaker when the early 1990s are included (0.5 to 0.6) but become larger from the mid-1990s onwards (0.7 to 0.9); and especially from 2001 for someone on 200%AW. In fact, in the last decade or so the correlations for migration with post-tax wages appear larger than with pre-tax wages.

4.2 Differences in Tax Rates Across Income Sources & Investment Vehicles

New Zealand taxes different forms of saving & investment at different marginal rates

New Zealand has a variety of tax rates applicable to different income sources (e.g. interest, dividends, capital gains) and different vehicles through which income may be derived (e.g. companies, trusts, PIEs, LAQCs, partnerships). This distorts investment towards lower pre-tax returns if post-tax returns look better, so that investment is driven by tax-planning rather than fundamentals.

Table 4.3 shows the differences in tax rates applicable to certain investments in NZ, for a top rate (39%) taxpayer. These are highly variable, driven mainly by:

(i) differences of up to 29% between the MTR applied to investments via companies (30%), PIEs (30%), Trusts (33%) and individuals (39%); 50/53/59% for income levels where WfF abates);
(ii) the absence of a tax on capital gain;
(iii) availability of expense deductions at 39% against certain assets with income streams taxed at 0%, 30% or 33% (e.g. investor housing, shares); and
(iv) a zero tax rate on owner-occupied housing investment (but without expense deductions).

Different tax rates distort investment choices toward tax-favoured rather than most productive investments

Figure 4.8 illustrates the differences described in **Table 4.3**.

Each of these factors hinders efficient investment by encouraging investor choices to be driven by post-tax, rather than pre-tax, difference in returns and undermines tax revenue-raising via use of tax base loopholes. Broadening the base, and reducing the average tax rate, should be capable of increasing revenue whilst improving efficiency.

The non-taxation of capital gains encourages over-investment (e.g. in housing)

The major pre-/post-tax difference is the non-taxation of capital gains which (a) increases the post-tax return to housing investment (owner-occupied and rental) and (b) for company shares, encourages retention of earnings rather than payment of dividends, with the latter taxed at personal rates. New Zealand is unusual within the OECD in this generosity of capital gains treatment (see IMF, 2007).

TABLE 4.4 : Housing Investment Rates of Return 1997-2006

	1997-2006	2004-06
Parameters used in calculations	***Percent***	
median rental yield	6.0	5.1
house price inflation	7.7	14.7
effective mortgage rate	7.6	7.5
marginal income tax rate	39	39
business tax rate	33	33
[stock market returns: all companies]	[10.4]	[18.3]
Investment in Housing	***NZ$***	
own capital invested	100.0	100.0
value of housing purchased [a]	500.0	500.0
mortgage interest paid	-30.5	-30.2
rent (net)[b]	17.0	14.0
capital gain	38.5	73.6
Sub-Total	**25.0**	**57.4**
Tax gain from interest deduction (33%)	10.1	9.9
Tax gain from depreciation allowance	2.5	2.5
Total	**37.5**	**69.8**
Capital gains tax		
at marginal income tax rate (39%)	-15.0	-28.7

[a] assumed 80% leveraged house purchase in line with historical evidence.
[b] rent net of property tax (3%) and income tax paid on rent at (33%).

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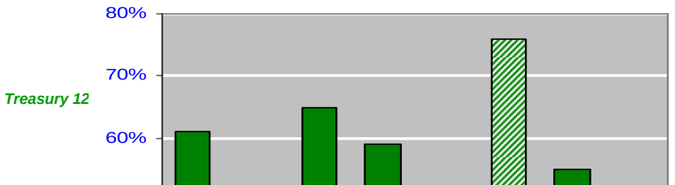
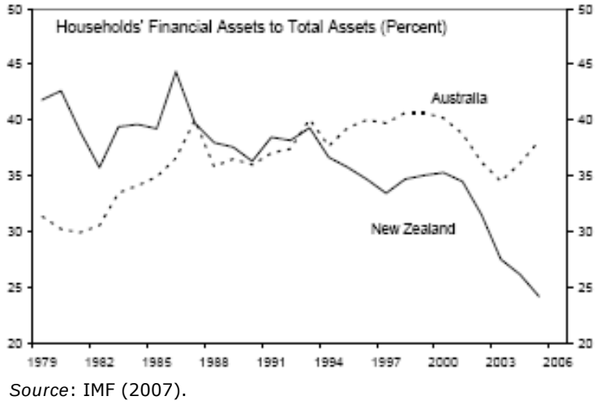
For example, **Table 4.4** shows the pre- and post-tax rate of return on investment housing over the 1997-2006 period, calculated by IMF (2007). Similar calculations are also shown for 2004-06, when house price increases gave rise to especially strong capital gains. These housing capital gains are relatively *short-run*, and unlikely to be sustained over a longer period, but they illustrate how far the tax treatment of an asset can affect relative rates of return. The table shows that before the tax-advantages of interest deductions on borrowing and depreciation are applied, housing investment yielded a nominal pre-tax annual return of around 25% which became 37% post-tax, meaning the tax system subsidised these investments. By comparison the pre-tax return on shares over the same period was around 10%. The table also shows that the tax-favouring of investor housing could have been significantly reduced or even removed via capital gains taxation during 1997-2006.

FIGURE 4.9 : Non-Financial Asset Shares (% of total assets)



From a productivity perspective, the major concern would be where the supply of a tax-favoured



Source: IMF (2007).

FIGURE 4.10 : Income Tax Progressivity OECD, 1985-2004

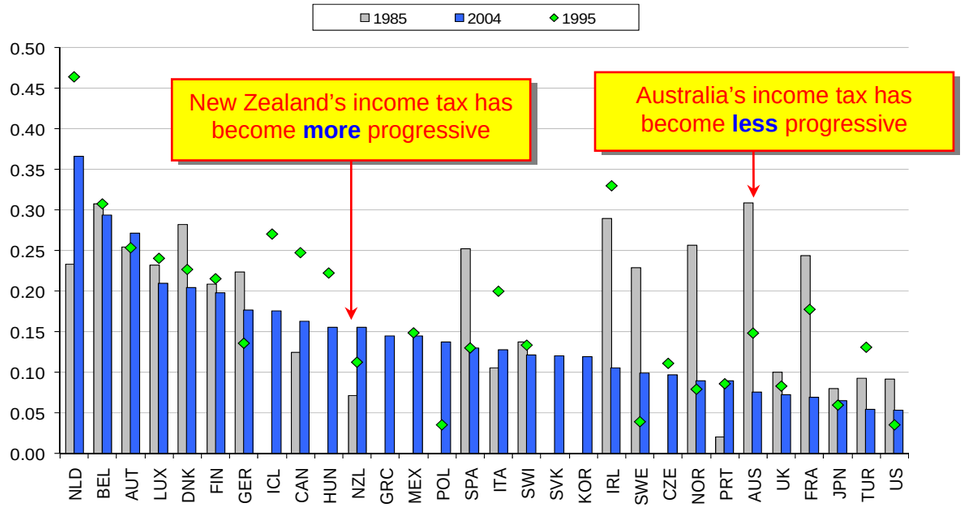


FIGURE 4.11 : Redistribution and New Zealand's Personal Tax & Transfers

New Zealand has a high share of assets in non-financial form, especially housing

investment is relatively restricted (such as urban housing). In this case capital gains may largely arise from an appreciating in the asset's relative price rather than increased quantity. This tax-favouring therefore diverts resources away from productive investments where high returns would be expected to attract increased supply and hence boost output and productivity. **Figure 4.9** illustrates the difference between New Zealand and other OECD countries in the share of non-financial assets in total assets. At around 76% New Zealand is much higher than comparable countries. The lower half of **Figure 4.9** shows trends in this non-financial share relative to Australia in recent decades. It can be seen that the share of financial assets has been declining since the early-1990s. This partly reflects house price booms which increase the relative value of housing assets and have been strong in recent years. These trends can be driven by many factors; of importance here is that they signal a diversion of investment increasingly into non-financial investments.

A productivity focused agenda for personal tax-setting therefore points to reductions in the rate of capital income tax to encourage capital growth, and other productivity drivers, in New Zealand. Harmonising these rates across types of investment would reduce the effect of taxes on investment decisions. Broadening the base (e.g. via taxing capital gains) would encourage a shift away from low productivity investment and towards those with higher pre-tax rates of return, and allow average tax rate reductions.

4.3 Equity Objectives

Focussing only on personal income taxes gives a misleading picture of inequality because capital gains are not taxed and the equity outcomes of public spending matter

In assessing the equity outcomes of government intervention it is important to remember that it is redistribution through the whole fiscal system (taxes, benefits and public spending) that matters. If taxes redistribute income away from the rich but the public expenditures that they finance benefit the rich disproportionately, then any tax-equity effects are undermined.

Though it is often easier to measure the distributional effect of personal income taxes, all taxes are ultimately incident on individuals, so that a false picture of the equity outcomes of taxation may result from focusing only on income taxes. The overall degree of tax-related redistribution depends on (i) how each tax base is distributed across individuals or households; and (ii) the tax rates applicable at different levels of the tax base. Thus, even though GST and corporation taxes are set at uniform rates (12.5% and 30% respectively) across fairly broad bases, differences in the share of spending across income levels, or differences in the holdings of corporate equities across income levels affect the overall incidence of taxation. Especially where some income sources – such as capital gains – are not taxed, inequalities in the distribution of currently taxed income may be quite misleading as a guide to the distribution of *all* income.

Personal income taxes and transfers

Personal income taxes are often used to achieve redistribution

Personal income taxes directly affect equity and the efficiency of households' savings/investment choices – as well as being an important revenue-raiser. The fundamental trade-off here is that the lower MTRs, required to improve incentives for efficiency, make redistribution harder. Some Scandinavian countries have sought to deal with this by separating the taxation of labour, from capital, income. Labour income is taxed progressively, with a lower 'flat' tax rate applied to capital income. This helps to deal with problems taxing internationally mobile capital (discussed below) but progressive labour taxation retains problems of labour supply or tax-planning responses that minimise taxable labour income. It is also likely to be of less value in New Zealand with our high international mobility of labour. Our labour market is about 4-5 times more internationally mobile than the Nordics (**Figure 1.2**).

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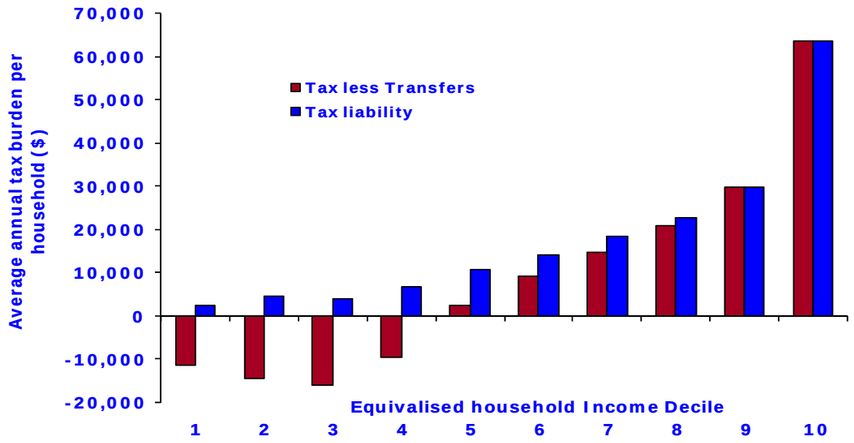
Figure 4.10 shows that New Zealand's personal income taxes (at least for someone on around average wages) are relatively progressive compared to other OECD countries – ranking 11th highest out of 30. Compared to Australia this is a dramatic turn-around over the last 20+ years: in 1985 Australia's income taxes were much more progressive, but Australia now ranks 25th out of 30 OECD countries (**Figure 4.9**).

New Zealand's income taxes are fairly

For New Zealand, **Figure 4.11** shows how the amount of personal income tax paid, and income



progressive by international standards

TABLE 4.5 : Household Income Tax/Transfer Liability as % of Taxable Income

Household Income Decile	1	2	3	4	5	6	7	8	9	10
Tax liability	17%	17%	18%	19%	20%	21%	23%	23%	25%	31%
Transfers	99%	72%	88%	46%	16%	7%	4%	2%	0%	0%
Net Taxes	-82%	-54%	-70%	-27%	4%	14%	18%	22%	25%	31%
Top rate = 30%										
Net Taxes	-82%	-55%	-68%	-27%	4%	13%	17%	20%	23%	26%
WTC = +75%										
Net Taxes	-107%	-62%	-72%	-32%	0%	10%	16%	21%	25%	31%

Transfers like family tax credits have much more equity impact than income taxes

Indirect taxes have little equity impact

tax *net of all cash transfers* to individuals or households (benefits, WfF, NZ Superannuation etc.), is distributed across 'equivalised' household income deciles.[6] **Table 4.5** shows these taxes, transfers and net taxes as percentages of average household taxable income within each decile. It can be seen that an 'average' household in the lowest decile receives a net transfer (*negative* tax burden) equal to -83% of their taxable income. A negative net tax liability applies to the bottom four deciles, with an almost zero liability for the 5th decile, and rising to a positive liability of 31% of taxable income for the top decile. Ignoring transfers, the tax burden ranges from 17% to 31% of taxable income across the 1st to 10th deciles.

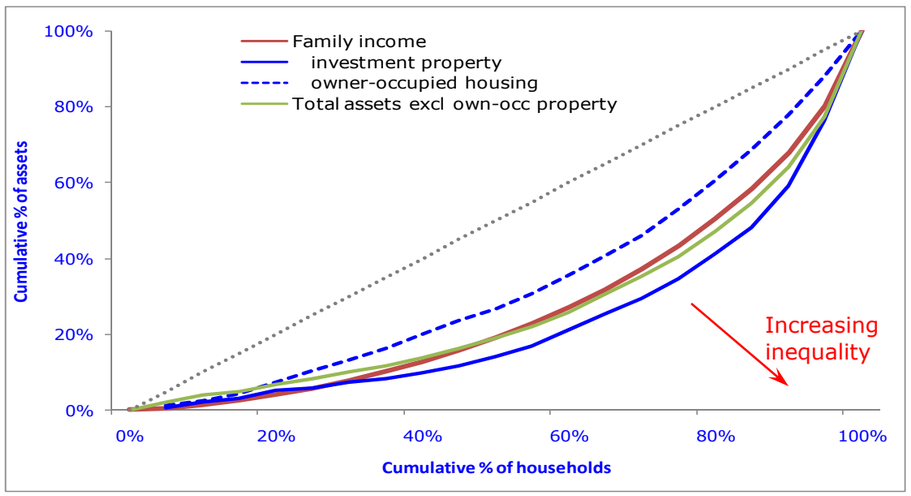
Table 4.5 also shows how redistribution is not very sensitive to personal income taxes. Reducing the top rate of income tax to 30% changes the range of effective average tax rates (from 1st to 10th decile) to -82% to 26%, compared with -83% to 31%. The final row of **Table 4.5** shows the impact of increasing the WfF Working Tax Credit (for approximately equal revenue as the revenue gain from raising the top rate from 30% to 39%). This shows that the distributional impact in the lower half of the household income distribution is much greater: e.g. the bottom decile goes from -82% of income to -107%.

The system of social transfers can therefore be seen to play the primary role in the redistribution of income though the combined tax-transfer system. Whereas transfers range from 99% to 0% of taxable incomes between the 1st and 10th deciles, the range for taxes is much smaller: from 17% to 31%.

Indirect taxes

The ability of indirect taxes to contribute to redistributuion is limited. This reflects both the broad GST base (compared to other countries) and the fact that indirect taxes can only affect redistribution to the extent that different taxpayers' consume goods in different quantities and if some goods (e.g. food) are taxed at different rates. With a uniform rate and few exemptions New Zealand's GST will be broadly proportional to taxpayer's post-tax income. New Zealand's system of excise tax is only mildly regressive (Creedy and Sleeman, 2006) and hence this also has little redistributive effect.

FIGURE 4.12 : Distribution of Assets by Family Income Level



(Untaxed) assets have a pro-rich distribution

Capital income taxes and capital gains

To the extent that not all sources of income are taxed equally, redistribution can be affected depending on *who* earns *which* income source. In New Zealand, some forms of income are taxed at a rate that is less than the 39% rate applicable to most income. For example, income earned through PIEs or Trusts is taxed at 30% or 33%. To the extent that higher income earners also earn proportionately greater amounts of these forms of income, redistribution will be less than if the 39% rate applied to all income. Of greatest quantitative importance is the non-taxation of capital gains. Since assets are unequally distributed (pro-rich), it can be expected that the distribution of the main forms of capital gain will also be pro-rich. Hence introducing a capital gains tax would further the redistribution of income.

Table 4.6 : Taxing Capital Gains

Taxable income	A	B	C	D

Taxing capital gains could have a similar equity impact to income taxes

In Brief

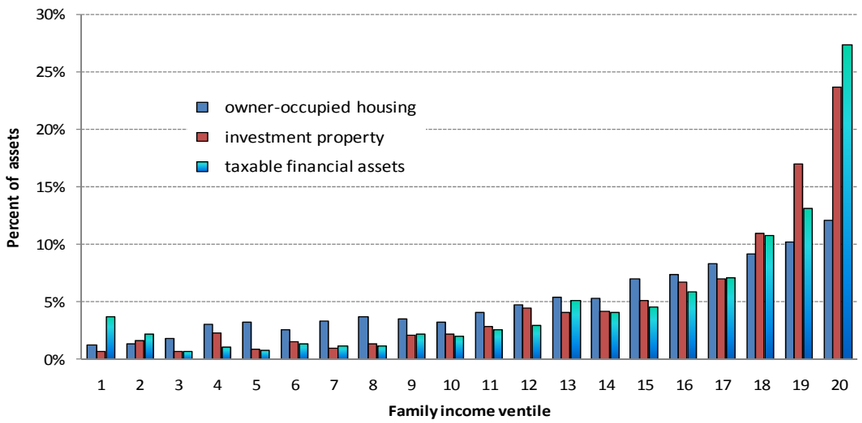
Table 4.6 below shows, under current tax rules, how the effective average tax rate (EATR) of an individual declines as more of their total income is earned through untaxed capital gains. The table highlights that whereas currently EATRs can be falling with increasing income, the taxation of capital gains would be consistent with progressive tax equity objectives. That is, taxing capital gains helps ensure that the ratio of the tax burden to income increases with increasing income.

Figure 4.12 shows the distribution of income and assets across families in New Zealand, based on data from the StatsNZ 'SoFIE' database for 2003/04. The curves in this figure can be interpreted as measuring the degree of inequality to the extent they deviate from the 45° line. It can be seen that, compared to the inequality of family income, investment property is more unequal but owner-occupied property is less unequally distributed. However, excluding owner-occupied property, all remaining assets (investment property & financial assets) are distributed almost identically to income. Thus replacing currently taxed personal income with capital gains tax revenue could be expected to deliver similar degrees of redistribution.

Salary	$90,000	$60,000	$60,000	$60,000
Capital gain	none	$30,000	$90,000	$180,000
Total	$90,000	$90,000	$150,000	$240,000
Tax liability[1]	$23,500	$13,000	$13,000	$13,000
Tax liability if all income taxable	$23,500	$23,500	$46,900	$82,000
MTR on next dollar of taxable income	39%	39%	39%	39%
EATR (current rules: no CGT)	**26.1%**	**14.4%**	**8.7%**	**5.4%**
EATR incl. capital gains tax	**26.1%**	**26.1%**	**31.3%**	**34.2%**

FIGURE 4.13 : Ownership of Assets/Liabilities by Income Ventile

Panel (a)



Panel (b)

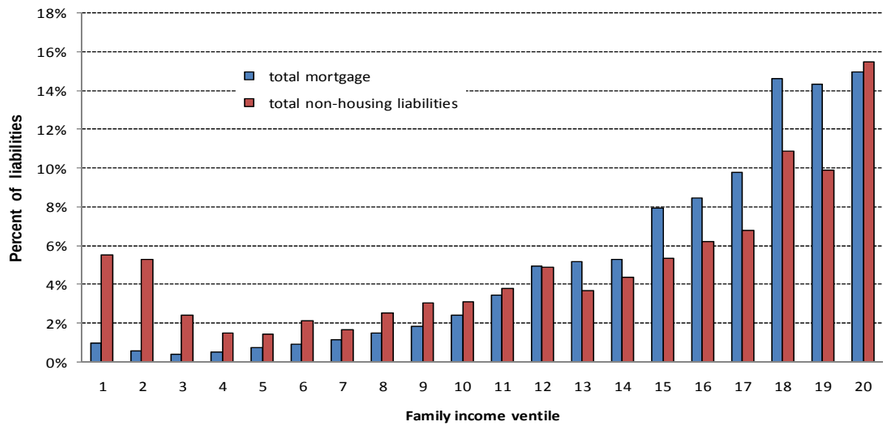


FIGURE 4.14 The Composition of Transfers by Household Income Decile

[1] Based on the Budget 2008 personal tax rate structure scheduled to be in effect as at 1 April 2011.

Investment property & financial assets are held especially by the top 5 ventiles

Figure 4.13 shows the shares of key (potentially) taxable assets and liabilities by family income ventile (each 5% of income). 'Taxable financial assets' here include the SoFIE categories of 'financial assets in (and not in) unit trusts or funds' and 'business ownership and investment'. (Excluded categories are 'bank assets', 'life insurance', 'motor vehicles' etc.)

An equal distribution of assets/liabilities would result in a graph in which each ventile 'bar' was at 5%. **Panel (a)** shows however, that the top 5% of families by income hold over 25% of taxable financial assets and just under 25% of investment property. The more equal distribution of owner-occupied property is also evident – the top 5% of families own around 12% of such property. Essentially, the top 5 ventiles (25% of families) appear to hold more than equal shares (i.e. 5% per ventile) of financial and investment property assets, with the remaining 75% of families holding less than equal shares.

Mortgage debt is also unequally held but much of this will finance owner-occupied property

Figure 4.13, Panel (b) shows the distribution of housing (mortgage) and non-housing liabilities. With a capital gains tax, these would be potentially deductible from any taxable assets (depending on the tax base chosen). It can be seen that these are also unequally distributed, but less so than assets. This will partly reflect the fact that much mortgage debt is held against owner-occupied housing assets. If owner-occupied housing was exempt from a capital gains tax, an unknown fraction of these liabilities would similarly be exempt.

New Zealand's capital gains taxation is ad hoc

The case for a capital gains tax on efficiency grounds has been made in previous sections. The evidence here suggests that such a tax would likely also help achieve redistributional objectives. Independent research by Burman and White (2003) suggests that New Zealand could benefit from a capital gains tax, despite its rejection (on balance) by the 2001 *Tax Review*. After a detailed examination of the arguments for and against a capital gains tax in New Zealand, Burman and White (2003, p.385) conclude:

> There is no perfect way to tax capital gains in a real-world income tax. Not taxing them, or taxing them in an *ad hoc* and inconsistent fashion, as is done in New Zealand invites unproductive tax avoidance, creates uncertainty for taxpayers, and is inequitable.

The benefit-transfer system

As in many other countries, in New Zealand the system of social assistance transfers (e.g. unemployment and dependent parent benefits, family tax credits etc) aim to achieve a number of objectives. These include providing an income safety net for those suffering temporary income losses, redistributing towards lower incomes, reducing child poverty, and encouraging increased labour force participation. The success of the transfer system may be judged by how well it achieves its objectives, and by how far it generates undesirable consequences in association with those objectives.

Evaluating the transfer system depends on how well it meets several objectives

Evaluating the transfer system therefore requires value judgements around the relative importance of the various objectives, and what weight is given to any adverse consequences. These judgements are not objective, but will depend in part on political and social priorities. For example, in targeting tax credits to families based on their incomes, there are trade-offs to be made around the income levels at which these are withdrawn and the rate of withdrawal. This typically involves high effective marginal tax rates at some income levels, and the choices around *which* income levels face high effective marginal tax rates can be important for labour supply.

In Brief

Given the prominence among New Zealand governments' political objectives of redistributing income towards low incomes and encouraging (or not discouraging) labour force participation, it is worth considering how well these are achieved before any reforms to the system could be considered. The analysis in **Table 4.5** showed that transfers as a whole are important contributors to the distribution of post-tax-and-transfer incomes, especially among lower income deciles. For example, transfers represent almost 100% of taxable income in the lowest decile (i.e. household taxable income of almost $14,000, is 'topped-up' by transfers of almost another $14,000).

There are also various trade-

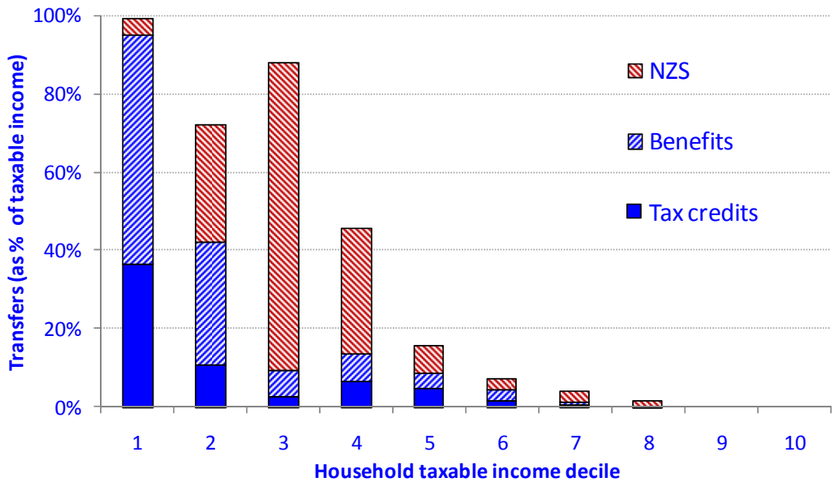


FIGURE 4.15: Cumulative Percentages of WfF Tax Credits by Income

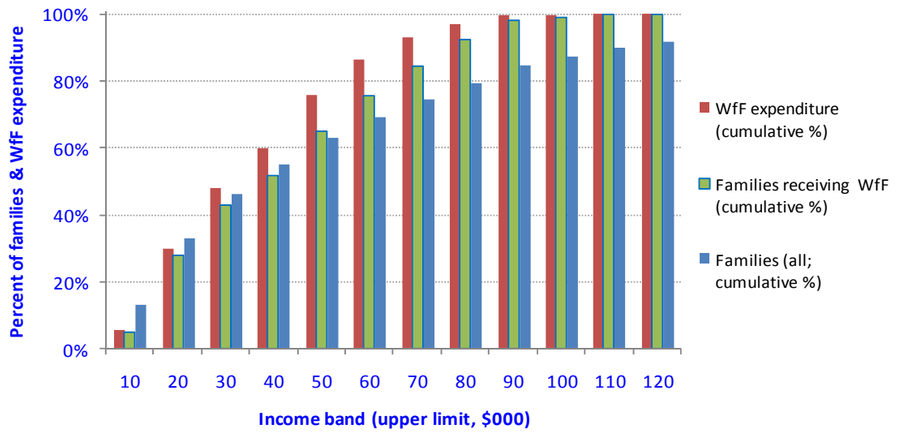


FIGURE 4.16 : Cumulative WfF Expenditure by Family Income

offs to be made

Figure 4.14 shows how these transfers are decomposed – into tax credits (mainly WfF), benefits and superannuation (NZS) – and distributed by household income decile. As a fraction of income, tax credits and benefits are targeted mainly at the lowest two deciles, while NSZ recipients are mainly in deciles 2-4. That is, NZS generally succeeds in raising superannuitants incomes (consistent with international evidence that poverty among New Zealand pensioners is low by OECD standards).

New Zealand's tax credit and benefit system is reasonably well targeted

Figure 4.15 focuses on family tax credits. There are a number of arguments for and against targeting such credits at *low income* families in particular – depending on views on the merits of supporting those on low incomes compared to the benefits to society of supporting children in general. **Figure 4.15** provides some evidence on the degree of targeting in the NZ tax credit system, by showing the percentages of eligible families and WfF expenditure by income level – projected for 2009. For example, ***if*** it was desired to target families with incomes below, say, $50,000, **Figure 4.15** shows that, of all families receiving WfF, just over 60% fall into this category. Around 75% of WfF expenditure is paid to those 'low income' families. This represents a modest degree of targeting but still means that almost 40% of WfF recipients have incomes above $50,000 and around ¼ of WfF expenditure goes to them. Clearly, evaluating the degree of targeting achieved by the current system depends on the income threshold(s) and abatement thought appropriate, given the objectives of the system

More targeting of family tax credits would involve many families being removed for small fiscal gains

Figure 4.16 shows how WfF expenditure is distributed across households where these are ranked in ascending order of family income. This can be seen to be approximately linear – except for the highest income recipients (far right-hand-side) - so that each additional 10% of eligible families (ranked by income) lead to approximately similar additional amounts of WfF expenditure. To target WfF more on lower income families, for example by removing the top 20% of families (ranked by income) would reduce the total WfF expenditure by $0.3bn - from $2.8bn. to $2.5bn. Thereafter, further 20% 'slices' reduce WfF by approximately $0.6-0.7bn. However improving targeting typically involves trade-offs such reducing the initial abatement-free zone or increasing the abatement rate, both of which harm work incentives. Therefore it is difficult to improve targeting without affecting other key elements of the programme.

Other public spending

Education and health spending contribute to redistribution

Evidence on other forms of public spending – mainly health and education - suggest they can make a substantial contribution to income redistribution by directing public spending more towards those on lower incomes. For example, spending on health diseases mainly afflicting the elderly or raising tertiary education participation by students from low-income families tends to be redistributive. Crawford & Johnston (2004) find that in New Zealand, public education and health spending both benefit lower income households disproportionately, while Brandolini & Smeeding (2007, p.13) report for OECD countries that "empirically, health and education transfers are as large or a much larger part of what the welfare state does for families than are the provision of cash benefits".

5. Corporate Taxation

In Brief

Globalisation is increasingly affecting where companies choose to locate their new investment and company headquarters and where they declare their profits. A recent authoritative survey by Devereux (2007, p.41) concludes:

> *"It is clear from this accumulated evidence that taxation does play a role in affecting the choices made by multinational companies. … effective average tax rates tend to play a*

[2] Most economists would argue that all taxes are ultimately, if *indirectly*, incident on individuals.

[3] 2006 NZ census

[4] Hooks et al (2005).

[5] An average exchange rate for the period is used to convert Australian real wages into $NZ to remove the impact of short-term exchange rate fluctuations. The correlation here is affected by the upward trend in both variables and does not imply *causation*.

[6] 'Equivalised households' are measured by weighting additional adults and children in the household differently to account for sharing economies.

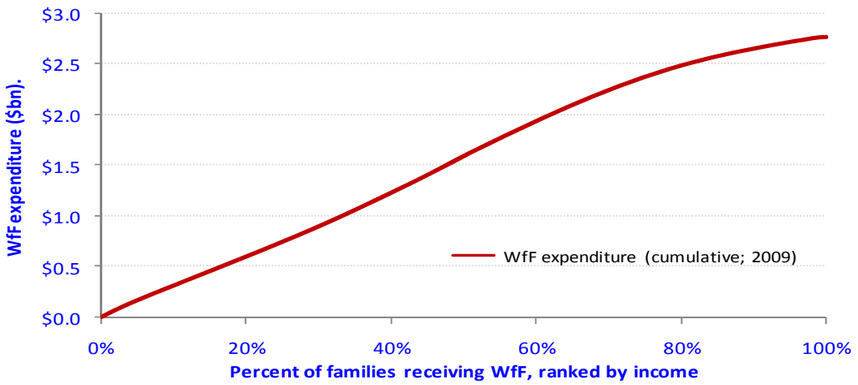


FIGURE 5.1 : Statutory Corporate Tax Rates in the OECD

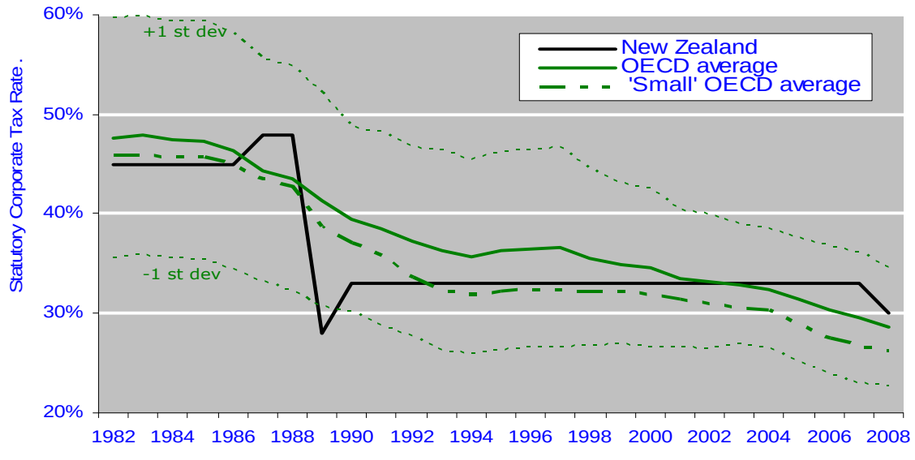


FIGURE 5.2 : Corporate Tax Revenues in the OECD

significant role in discrete location choices, and hence in the overall allocation of capital; but effective marginal tax rates are much less significant. Differences in statutory tax rates appear to play a significant role in the location of taxable income; there is evidence that such differences affect financial policy, the repatriation of income and transfer prices."

Globalisation means many companies now respond to international differences in corporate rates

These effects have become possible in the last 20-30 years as communications technologies have shortened 'economic distances', and new financial products make it harder for national governments to monitor both international transfer pricing and the development of corporate tax-planning vehicles.

Traditionally, for closed economies, the effective marginal tax rate (EMTR) has been considered the relevant rate for corporate investment decisions: the additional tax liability on each dollar of new investment. With countries becoming more open, the relevant corporate tax rate changes. As Devereux notes, international investment location choices are affected by the effective *average* tax rate (EATR) differences across countries, while international profit-shifting by multinational companies responds to statutory tax rate differences. Conditional on the location choice, the EMTR becomes relevant for investment decisions. Countries might therefore be expected to compete (or cooperate) in setting lower statutory and average corporate tax rates. Countries with 'inefficient' corporate tax settings – such as high statutory rates and narrow bases – might be expected to be out-competed by more efficient corporate tax settings.

International corporate tax rates have steadily declined; Even at 30%, NZ's statutory rate is relatively high

International corporate tax evidence suggests that globalisation has affected both statutory rate settings and revenue trends in recent decades. Since at least the 1980s statutory rates of corporation tax have been declining across the OECD – see **Figure 5.1**. New Zealand was ahead of this trend with its large rate cut in 1989 but this has been progressively eroded and, even with the 2008 rate cut to 30%, New Zealand remains above the OECD average. **Figure 5.1** also shows that small, open economies – more comparable to NZ - on average have lower corporate tax rates. This tends to reflect the need for smaller countries to use tax advantages to help overcome some non-tax disadvantages (such as smaller markets) in attracting foreign firms or direct investment (FDI). Such investment is also relatively more significant to small economies (e.g. for raising tax revenue or investment levels) than it is to larger economies. New Zealand's corporate tax rate is now high compared to other small OECD countries.

But: corporate tax (CT) revenue growth has been strong; NZ & Australia have the highest ratios of CT/GDP (6%)

Unlike tax rates, corporate tax revenues as a ratio of GDP have been stable or even trending up in recent years in the OECD on average. This reflects an increasing corporate tax base in these countries – either because of legislated base broadening or a rising share of corporate taxable profits in GDP, or both. Evidence suggests that both of these have been happening across OECD countries. In New Zealand, **Figure 5.2** shows that revenues have been fairly buoyant in recent years, which mainly appears to reflect a growing corporate base via a higher share of taxable profits in GDP. Some of this likely reflects the replacement of personal with corporate revenues as tax rate differences encouraged incorporation. It would therefore be vulnerable to any re-alignment of these tax rates.

There are some opportunities for CT base broadening

Significant extensions to the corporate tax base in New Zealand have been few in recent years, and it is already fairly broadly defined compared to other OECD countries - i.e. there are relatively few exclusions, beyond the general non-taxation of capital gains. Elements of 'base narrowing' in recent years however include the increased generosity of depreciation allowances and the introduction of R&D tax credits.

Corporate-personal tax rate differences encourage incorporation

Section 4 suggested that the wedge between the top personal rate and the company rate encourages tax-motivated incorporation which undermines the integrity of the personal tax system. **Figure 5.3** shows that, following the increase in the top personal rate in 2000, the number of company tax returns grew at almost 10% p.a. over 2000-06 compared to around 4% p.a. over 1993-2000. The increase in profit growth rates is much less (2000-06 = 9%; 1993-2000 = 8.3%) suggesting that it was small (low profit) companies that grew most after 2000. If this tax-motivated incorporation was encouraged by the 39% rate, there should be slower growth of unincorporated businesses after 2000. **Table 5.1** shows this is exactly what happened.

In Brief

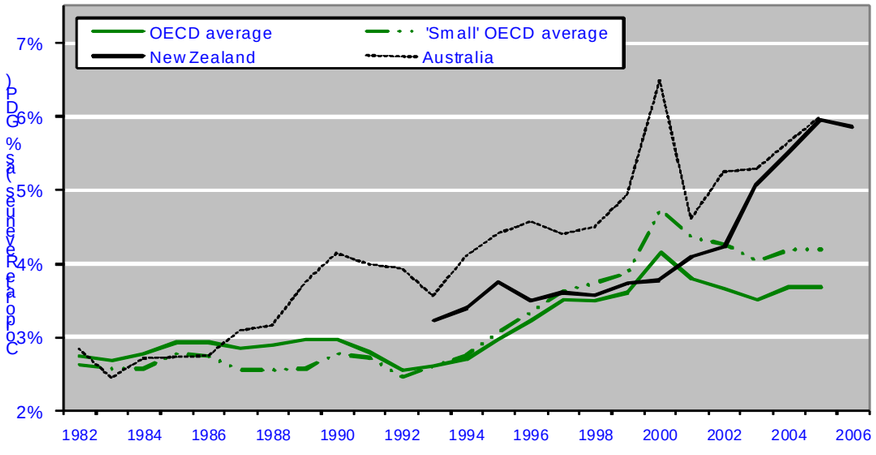
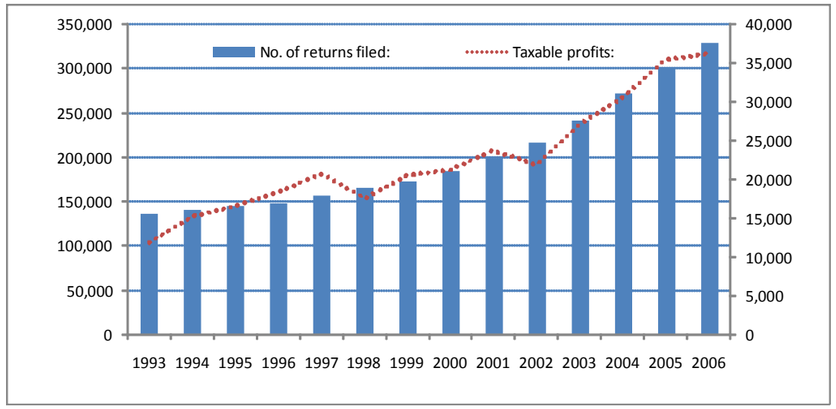


FIGURE 5.3 : The Growth of Taxpaying Companies



Both the numbers and income of unincorporated businesses grew slower or fell between 2000 and 2006 whereas they had both grown strongly before 2000.

CT rates may have to fall further to remain competitive

Will corporate tax settings have to change?

It remains unclear if recent international trends represent a 'race to the bottom'. Some arguments suggest that the international 'floor' to corporate tax rates may be well above zero. However, it seems likely that, for economies competing for footloose companies and investment, downward trends in statutory rates will continue. Sensitivity of New Zealand's corporate tax base to international developments is likely to continue and future corporate tax settings in New Zealand, *relative to Australia* in particular, will be influential.

The 2008 rate cut & any future reforms to personal taxes will reduce CT revenues

It is too early to assess the revenue consequences of the 2008 corporate rate cut from 33% to 30%; this should increase (indirectly) the attractiveness of corporate location in NZ but also has a direct and immediate revenue-depleting effect. Whether, with global trends, the recent rate reduction will be sufficient to uphold corporate revenues for a number of years, is uncertain. There is some, limited scope to broaden the corporate tax base further (as noted above), but revenue maintenance over the medium-term may require further rate reductions and/or some re-thinking following the report of the current imputation credit review, and any changes in corporate tax rates or imputation in Australia.

Key medium-term policy choices: change CT rate/base and/or tax mix?

Two key policy choices with respect to the future of the corporation tax are likely to be:

- whether to lead or follow Australia in any future decline in statutory rates of corporate tax, or leave corporate rates unchanged;
- over the longer term, whether to shift the tax mix towards those taxes with bases that are internationally less mobile, such as property taxes.

6. Where To From Here?

Reforms need to deal with:

High MTRs /ATRs on personal and corporate income

Variable rates of tax across investments

Objectives: Improve incentives; encourage investment; raise productivity

In Brief

Previous sections have identified a number of important trends relevant to the sustainability and efficiency of New Zealand's future tax system. It has also suggested that policy decisions around rates of tax applicable to different forms of income and investment vehicles (the statutory corporate rate and the set of personal tax rates), and decisions around indexation of tax and transfer thresholds have affected these properties of the tax system. The key aspects we perceive to require attention over the medium term, to contribute to productivity improvements and revenue sustainability are:

- reduce high MTRs on labour and capital income – relevant to labour force participation and levels of domestic investment and savings
- reduce high statutory and effective ATRs on corporate income – relevant to multinational and domestic firms' decisions to locate future investment at home or abroad, and where their profits are earned or declared
- equalise different rates of tax on different forms of investment – causing diversion of income into tax-favoured vehicles
- the zero rate of tax on income received in the form of capital gains – causing diversion of investment into those where substantial capital gains are anticipated even if pre-tax returns are greater elsewhere.

The key objectives for the tax system over the medium term are to:

- improve incentives for labour supply, entrepreneurship, and the retention of skilled labour within New Zealand;
- improve investment and savings by reducing the rate of tax on capital income and avoiding tax-induced distortions that divert savings/investment into tax-favoured or tax-exempt forms;
- Contribute to a wider reform agenda aimed at boosting future productivity growth whilst sensitive to equity considerations.

6.1 Tax Reform Proposals

Table 5.1 : Unincorporated Businesses: Numbers and Income, 1994-2006

Number (000s)	Income ($billion)	Growth: Numbers (%pa)		Growth: Income (%pa)	
2006	2006	1994-00	2000-06	1994-00	2000-06
790	11.5	3.8%	1.6%	4.4%	-0.2%

Priority Reforms

There are a range of potential reform options that would contribute to the objectives above. We consider that a package of reforms, involving a number of areas of the tax system, is required over the medium term. The main elements of our proposed reforms are described below.

Harmonise & reduce top MTRs

Personal income taxes: we see reform of the variable rates of tax on different incomes/investments, and the reduction of the top personal income tax rate, all to 30%, as having greatest impact and most in need of reform in the short-to-medium term.

Broaden the tax base by taxing capital gains

Capital gains taxes: the extension of the income tax base to include capital gains would be a second priority, contributing importantly to the integrity of the overall income tax system, and contributing to base broadening.

Reduce statutory corporate rate in due course

Changes to the corporate income tax: further rate cuts and base broadening are not pressing but can be expected to become more pressing over the next 5 years. A major reduction in the statutory rate in the near future could be a viable alternative 'first-mover' policy.

Use the transfer system to maintain redistribution

Changes to the system of social welfare transfers: would help reduce MTRs/ATRs for key groups of labour force participants (over the next 3-5 years) and/or could be used more to achieve equity objectives as the tax system become less able to do so due to tax base mobility issues (beyond 5 years).

While these elements are listed in rough order of priority, the policy proposals could be combined and phased in different ways to respond to government priorities. Alternatively, some objectives such as reducing tax-motivated incorporation, could be achieved by strengthening some tax code rules.

6.2 Longer-Term Changes to the Tax Mix

Begin switching towards consumption & property taxes over the longer term

Into the longer-term, as the processes of globalisation and population ageing build up, we suggest a move towards less mobile tax bases (land and property) should be considered in the light of emerging evidence on the integrity of the income and corporate tax bases over the medium-term. Such a substitution of tax bases should be capable of raising similar revenues at less cost but, especially for property taxes, would require a transition to persuade taxpayers of the need for change.

Reforms should be sequenced and sensitive to Australian reform

As the Introduction showed, population ageing is projected to have a larger impact from around 2020 onwards. This will affect the mix of taxes as older age groups – who tend to earn less and consume a larger fraction of their incomes – increase their share of the population. Two ageing effects are relevant here. First, the increase in consumption relative to income raises the GST base relative to the personal income tax base. Second, with increasing demands for age-related public spending (health, NZS) relative to GDP, there will be an associated need to raise tax revenue. This makes it especially important to raise revenue in the most efficient ways, hence moving away from more distorting tax bases such as income tax, with high MTRs. This would require discretionary policy choices.

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In Brief

To retain and

7. Conclusions

Foreign assessments of New Zealand's tax system have traditionally viewed it favourably.

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improve its best features, New Zealand's tax system will have to adapt to growing global pressures

Some recent changes in the tax system have undermined its efficiency properties

Our tax system is becoming more sensitive to international mobility of capital and labour, especially across the Tasman

Different tax rates on different income sources or investments harm the tax system's integrity

International pressures on corporate tax rates are likely to increase

In Brief

But high

However, the evolution of the system in recent years together with global trends has been changing the ways in which the tax system impacts on taxpayers' behaviour. Increasingly into the future, without policy reform, these trends can be expected to undermine the revenue integrity of personal and corporate income taxes in particular.

Recent tax changes (such as fiscal drag, top tax rate increases, reduced PIE and corporate tax rates, and changes to social transfers) have helped achieve a number of objectives (such as building fiscal surpluses; improvements in equality, international competitiveness and labour force participation) but have also undermined some efficiency aspects of the tax system. This is worsening some incentives to participate in the New Zealand labour market versus Australia, leading to higher effective rates of tax on investment/savings, and creating tax wedges between alternative types of investment. Evidence from recent trends in income growth for different types of taxpayer and the increasing use of tax-planning options suggest that these perverse incentives and revenue trends need to be arrested in the short- to medium-term.

Over the medium-term (5-15 years), without tax reform, international trends in corporate tax can be expected to undermine the international competitiveness of New Zealand's corporate tax regime. This will be sensitive to Australian choices in particular. New Zealand's corporate tax rates remain high by OECD standards, especially when compared to other small open economies. As other countries increasingly use their corporate tax regimes to attract and retain footloose investment, New Zealand will have to consider carefully how to structure our corporate regime to maximise the gains to New Zealand.

International labour mobility, especially across the Tasman, is already large and can be expected to increase: New Zealand and Australia are effectively a single labour market. Maintaining and reversing the trans-Tasman wage gap is therefore an important objective to avoid losses of (especially skilled) labour and this is likely to depend on raising New Zealand's productivity growth rate over the medium-term. The tax system has both a direct effect on the wage gap (by changing net-of-tax wages) and an indirect effect to the extent it encourages/discourages the investment, entrepreneurship and innovation that drive productivity growth.

International and New Zealand evidence therefore suggests three key properties of the tax system which are harmful for revenue integrity, efficiency and productivity growth:

- high effective rates of personal income tax & high rates of tax on capital (personal or corporate);
- large wedges between the top personal, and corporate, rates of tax;
- different tax rates applicable to different investment vehicles or income sources.

International pressures to reduce corporate rates therefore put a strain on the feasible progressivity of the personal tax structure. Some countries have sought to deal with this by taxing (mobile) capital at a lower rate than (immobile) labour. The scope for this in New Zealand is likely to be more limited due to the high openness of our labour markets. Into the future we should ensure that our tax system avoids discouraging investment and savings. This can be achieved by:

- lowering the overall rate of tax on capital income; and
- setting uniform capital income tax rates across broader tax bases including capital gains.

Reducing the rate of tax on capital income is not simply a matter of reducing the corporate tax rate however. The personal tax system also taxes some forms of capital income – such as interest – and the 'final' tax on corporate profits, for many New Zealand shareholders, is the top

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personal tax rates are also important for some investment decisions

personal rate of income tax. This reflects the impact of imputation credits which, for many New Zealanders, mean that the corporate tax is a withholding tax with 'final' tax liability determined by the personal tax schedule. Reducing the corporate rate represents a 'final' tax reduction for foreign companies (which may stimulate their investment in New Zealand) and also for foreign portfolio investment into New Zealand except where tax reductions in New Zealand reduce foreigners' tax credits in their home tax jurisdiction.

These changes would help to make New Zealand a more attractive destination for investment in the short-to-medium term. Longer-term however, the clear conclusion from the evidence is that to maintain revenue and avoid discouraging economic activity, the tax system will have to:

- be sensitive to international settings on mobile tax bases;
- evolve away from tax bases that are internationally mobile; and
- respond to the impact of population ageing on tax bases.

Moving over the medium-term towards tax bases that are less mobile internationally will improve efficiency and revenue sustainability

A move in the direction of greater use of recurrent taxes on land and property would help towards these objectives. A move towards consumption taxes may not help to retain internationally mobile labour but, with population ageing, may help to maintain revenues as an ageing population consumes a greater fraction of its income. However, this may also mean that for governments to achieve their redistributional aspirations greater use of public expenditures that affect those on lower incomes, and/or specific tax-compensating transfers for those on low incomes will need to be considered.