Fiscal Drag and Trans-Tasman Income Differentials

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In New Zealand since 1 April 1998 the lower and middle personal income tax rates and thresholds have remained unchanged and a new top rate and threshold were introduced on 1 April 2000. Yet although nominal income tax thresholds have not increased since 2000, changes to the distributions of wage rates and hours of work have increased the coverage of higher personal income tax rates and levels of tax burdens. This paper estimates the effect of this fiscal drag as being in the order of an additional $1 billion dollars in income tax revenue per-annum. To highlight one consequence of this fiscal drag this paper then illustrates the extent that this increase in taxation has amplified the growth in trans-Tasman income differentials.

1. Introduction

Media reports regularly draw attention to the flow of New Zealand labour across the Tasman due to the arguably higher living standards in Australia. Key factors seen to influence this flow include differences:

- in gross market incomes
- between gross market incomes and net incomes in the hand due to personal income tax scales, family tax credits, and accommodation and childcare assistance
- in the prices of goods and services (and thus the purchasing power of incomes in the hand) in both countries
- in the ease of wealth accumulation, particularly home ownership and support and incentives for savings, and the portability of retirement savings.

The emphasis in this paper is on differences in personal income tax scales and family tax credits in the two countries. Since 2000 personal income tax policies in the two countries have diverged, with New Zealanders' facing increasing personal income tax burdens and Australians receiving personal income tax relief largely in the form of increasing personal income tax thresholds. To illustrate the significance of this policy divergence, this paper also emphasises the degree to which personal income tax policies have amplified the growth in trans-Tasman income differentials.

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2. Illustrating the gap in gross wages

To illustrate the difference in gross market incomes in New Zealand and Australia, data on salaries in the construction industry from the Hays Salary Survey 2007 are contained in Table 1.[2] As this survey noted this industry is currently facing a shortage of entry-level and intermediate candidates, which reflects the comparatively high salaries offered to skilled New Zealanders in countries such as Australia. Areas where there are strong demands for additional skilled labour in New Zealand include structural and civil engineers, project managers, and specialist trades-people. The salary bands below are those for Auckland and Sydney, which both have relatively high living costs for their countries.[3]

Table 1 Selected salary bands

Role (Industry)	Auckland (NZ$)	Sydney (AU$)	Sydney (NZ$ PPP)(1)
Civil/Structural Engineer (Civil and Structural)	55,000 – 100,000	55,000 – 120,000	57,292 – 125,000
Project Manager (Construction Civil)	80,000 – 120,000	95,000 – 165,000	98,958 – 171,875
Leading Hand (Construction Building)	45,000 – 55,000	55,000 – 80,000	57,292 – 83,333
Contracts Administrator/ Quantity Surveyor – Junior (Construction Building)	40,000 – 60,000	45,000 – 75,000	46,875 – 78,125

Notes: (1) Based on 2007 OECD PPP rates
Source: Hays 2007 Salary Survey

A general point that these bands illustrate is that salaries in New Zealand are close (but generally lower) than those in Australia at the bottom of the bands, but do not increase as high as those in Australia. The salary bands for Australia include superannuation contributions but those for New Zealand do not.

Although gross wages are higher in Australia this does not, however, automatically equate to a higher standard of living. The standard of living provided by a dollar of earned income in Australia is not the same as the standard provided by a dollar earned in New Zealand. There are two key

[2] Hays (2007). 'Construction, Engineering and Property' and 'Resources and Mining', pp. 98 and 109, http://www.hays.com.au/salary/default.aspx

[3] In the construction building industry, Perth, Canberra and Brisbane/Gold Coast also had high salary scales in Australia. Lower salary scales were found in Tasmania.

reasons for this. First, in each country a dollar in income has a different purchasing power due to differences in the prices for goods and services. Second, the relationships between gross and net incomes differ in each country, due to differences in income tax schedules and family income assistance. Thus two families with the same pre-tax income in both countries would have different incomes in the hand, purchasing power and standards of living. The remainder of this paper thus evaluates the effect of differences in personal income tax scales and family tax credits in the income differentials between the two countries.

3. Personal income tax policy

The current personal income tax scales in New Zealand and Australia are shown in Table 2. Unless otherwise stated, figures are in New Zealand dollars. Australian income tax thresholds are converted into New Zealand dollars based on OECD purchasing power parity rates (OECD 2007), which account for differences in the costs of a comparable basket of goods and services in different countries.

Table 2 Australian and New Zealand Personal Income Tax Scales

Australian Personal Income Tax Thresholds (1 July 2007)	Tax rate	New Zealand Personal Income Tax Thresholds (1 April 2007)	Tax rate
$0 – $6,250 (AU$6,000)	0	$0 – $9,500	15
$6,251 – $31,250 (AU$30,000)	15	$9,501 – $38,000	21
$31,251 – $78,125 (AU$75,000) (AU$80,000 from 1 July 2008)	30	$38,001 – $60,000	33
$78,126 – $156,250 (AU$150,000) (AU$180,000 from 1 July 2008)	42	$60,001+	39
$156,251+	45		

Source: NZIER, figures in NZ$ based on OECD PPP rates

At many incomes marginal personal income tax rates are lower in Australia than in New Zealand. The exceptions are for incomes from $31,250 to $38,000 (where the Australian rate of 30 percent is above the New Zealand rate of 21 percent) and incomes above $78,125. Further, due to the lower marginal tax rates at lower incomes, average tax rates are lower in Australia until high in the income distribution. Based on the purchasing power adjusted Australian personal income tax scale, average personal income tax rates in Australian are lower than in New Zealand on gross incomes below $195,624.

3.1 Fiscal drag

In New Zealand since 1 April 1998 the lower and middle personal income tax rates and thresholds have remained unchanged and a new top rate and threshold were introduced on 1 April 2000. Yet although nominal income tax thresholds have not increased, changes to the distributions of wage rates and hours of work have increased the coverage of higher personal income tax rates and levels of tax burdens. Wage increases mean that over time people slip into higher income tax brackets unless income tax thresholds also increase (fiscal drag).

To illustrate the extent of this fiscal drag, the current personal income tax thresholds can be compared with income tax thresholds adjusted to account for inflation. Accounting for inflation between 1 April 2000 and 1 April 2007 would require thresholds of:

- 15 percent up to $11,385 (currently $9,500);
- then 21 percent up to $45,540 (currently $38,000);
- then 33 percent up to $71,906 (currently $60,000); and
- then 39 percent on income above $71,906.

Based on these thresholds and using the Treasury's ready reconer for estimating the revenue effects of changes to tax thresholds, rates, and bases,[4] the effect of fiscal drag can be estimated as being in the order of an additional $1 billion dollars in income tax revenue per-annum. However, the full cost of this additional taxation is larger than the tax revenue collected from taxpayers. The full cost also includes the additional costs facing the Inland Revenue Department in collecting revenue, paperwork costs facing taxpayers in complying with their tax obligations, and efficiency costs from taxes influencing taxpayers' behaviour.

For instance, one area of increasing cost relates to growing incentives for income tax avoidance and evasion. In 2005 the Inland Revenue Department advised the incoming Minister of Revenue that taxpayers' incomes were clustering around the $38,000 and $60,000 marginal income tax thresholds and that this was likely to be, at least in part, evidence of tax sheltering or income splitting.[5] Since then incentives for tax sheltering or income splitting have increased. This has put pressure on the income tax base and led to individuals transferring resources from productive uses to spending resources on activities minimising their tax bills. Thus not only has the tax burden increased since 2000, but each dollar in taxation now comes with a higher associated cost to the economy.[6]

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[4] Treasury (2006). Revenue Effect of Changes to Key Tax Rates, Bases and Thresholds for 2006/07, www.treasury.govt.nz/readyreckoner/reckoner.asp

[5] Inland Revenue Department (2005). 'Briefing for the Incoming Minister of Revenue – 2005', Inland Revenue, Wellington, p. 33

[6] It has also been argued that this increasing transfer from the private to the public sectors has underpinned the expansion of government spending since 2000, and can thus be seen as a key

In Australia since 2000, personal income tax relief has largely been provided through increases in personal income tax thresholds. In general an increase in tax thresholds provides an equal (capped) benefit to all people with incomes above the new threshold, irrespective of their total incomes or hours of work. A reduction in tax rates, in contrast, provides a benefit that increases with incomes and hours of work. For these reasons, *ceteris paribus*, a tax rate reduction is likely to have a higher fiscal cost than an increase in tax thresholds.[7]

Since 2000 all personal income tax thresholds in Australia, except the tax-free threshold, have increased. The top personal income threshold, for example, has risen from AU$60,000 to a proposed AU$180,000 in 2008-09. Relative to average wage this top threshold will be the eighth highest in the OECD, compared to twentieth in 2004-05. The Australian Treasurer has argued that this increase will improve Australia's international tax competitiveness.[8] In relation to personal income tax rates, the lower personal rate (applying immediately above the tax-free threshold) has reduced from 17 to 15 percent and the top personal income tax rate reduced from 47 to 45 percent.

4. Fiscal drag and wage growth

To illustrate the increasing trans-Tasman income disparity from 2000 to 2006, Figure 1 shows the growth in average wage rates in New Zealand and Australia.[9] These calculations are based on the gross average hourly wages in the two countries multiplied by 40 to give a gross weekly income figure for income tax purposes. The rate of growth in gross wages is drawn from the OECD's dataset on MEI Earnings (Manufacturing).[10]

In New Zealand the gross average hourly wage rose by 22.1 percent over this period (to NZ$21.63 in 2006). However, due to fiscal drag the net income of a person working at this wage for 40 hours per-week increased by 18.9 percent. In contrast, in Australia the gross average hourly wage rose by 34.3 percent over this period (to AU$25.60 in 2006). Personal income tax changes over this period meant that the net income of a person working at this wage for 40 hours per-week increased by 33.6 percent. Personal income tax changes in Australia thus compensated middle wage earners for fiscal

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factor in driving the inflationary pressures facing the economy (NZIER (2007). *Quarterly Predictions*, June).

[7] Nolan (2007). 'Lifting Families' Incomes', *Policy Quarterly*, Institute of Policy Studies, Vol. 3, No. 2, Wellington

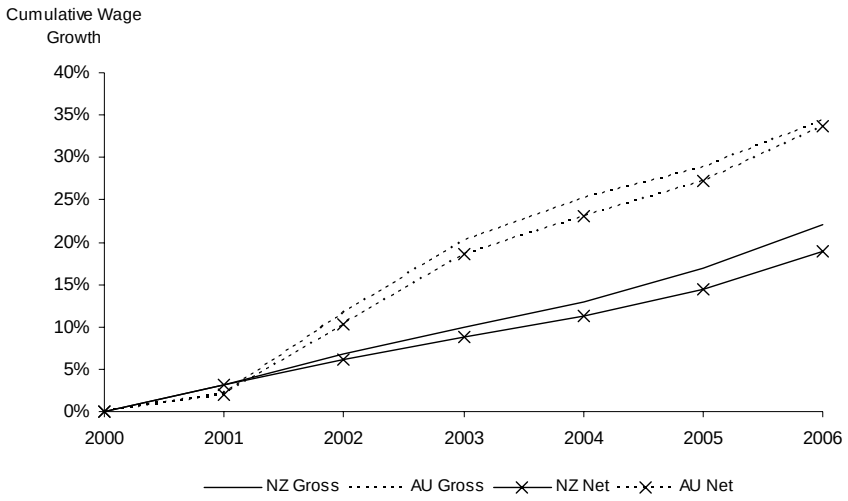
[8] http://www.budget.gov.au/2007-08/overview/html/overview_09.htm

[9] This section is based on data extracted from the OECD dataset on MEI Earnings (Manufacturing), Statistics New Zealand Quarterly Employment Survey and Australian Bureau of Statistics Average Weekly Earnings.

[10] www.oecd.org/std/mei

drag. Failure to increase tax thresholds in New Zealand over this period has amplified the income disparities between New Zealand and Australia.

Figure 1 Growth in average hourly wages 2000 to 2006



Source: NZIER, based on 40 hours work per-week, incomes net of personal income taxes

To further illustrate differences in the growth in net incomes these calculations have been repeated for workers earning 75 and 150 percent of the average hourly wage. For workers in both countries at 75 percent of the average hourly wage the increases in net income were within one percent of the increase in gross income. However, for workers in Australia at 150 percent of the average hourly wage income tax changes have lead to net incomes growing at a higher rate than gross incomes. At this wage rate in New Zealand net incomes have grown at a rate around 3.5 percent lower than the growth in gross incomes. At 150 percent of the average hourly wage, growth in net income in Australia (of 36.2 percent) has been close to double the rate of growth in net income in New Zealand (of 18.4 percent).

Table 3 Percentage increase in wages 2000 to 2006

Percentage of average hourly wage	Australia		New Zealand	
	Gross	Net	Gross	Net
75 Percent	34.3	33.4	22.1	21.6
100 Percent	34.3	33.6	22.1	18.9
150 Percent	34.3	36.2	22.1	18.4

Note: Based on 40 hours work per-week
Source: NZIER

4.1 Isolating the effect of income tax policy

Australian incomes growing at New Zealand levels

A major reason for the increasing differential between net incomes in New Zealand and Australia is the faster rate of growth in growth incomes in Australia. To isolate the effect of personal income tax policy, the following section thus considers a scenario where gross incomes in Australia grew at the same rate of the growth income in New Zealand.

Table 4 Effect of tax policy 2000 to 2006 (New Zealand growth scenario)

Percentage of average hourly wage	Australia (NZ Growth Scenario)		New Zealand	
	Gross	Net	Gross	Net
75 Percent	22.1	23.0	22.1	21.6
100 Percent	22.1	22.8	22.1	18.9
150 Percent	22.1	27.1	22.1	18.4

Note: Based on 40 hours work per-week, assumes gross incomes in Australia increase at the rate of increase in New Zealand

Source: NZIER

At average hourly wage in New Zealand net incomes over the period 2000 to 2006 increased by 18.9 percent and gross incomes increased by 22.1 percent. If Australian gross incomes increased by the same rate, at average wage Australian net incomes would have increased by 22.8 percent. Thus while tax policy has acted as a drag on the increase in net incomes in New Zealand, in Australia tax policy changes have supported increasing net incomes.

New Zealand incomes growing at Australian levels

To further isolate the effect of tax policy, Table 5 illustrates a second scenario where gross incomes in New Zealand grew at the same rate of the growth income in Australia over the period.

If New Zealand gross incomes increased by the rate of increase in Australia, at average wage net incomes in New Zealand would have increased by 30.5 percent (below the rate of growth in Australia of 34.3 percent). At 75 percent of average wage, the growth in net incomes in the two countries would have been identical, while at 150 percent of average wage the growth in Australia would have been 7.6 percent larger than that in New Zealand. Thus, as with the earlier scenario, while tax policy has acted as a drag on the increase in net incomes in New Zealand, in Australia tax policy changes have supported increasing net incomes.

Table 5 Effect of tax policy 2000 to 2006 (Australian growth scenario)

Percentage of average hourly wage	Australia		New Zealand (Australian Growth Scenario)	
	Gross	Net	Gross	Net
75 Percent	34.3	33.4	34.3	22.2
100 Percent	34.3	33.6	34.3	30.5
150 Percent	34.3	36.2	34.3	28.6

Note: Based on 40 hours work per-week, assumes gross incomes in New Zealand increase at the rate of increase in Australia

Source: NZIER

4.2 What difference has Working for Families made?

The major form of tax relief provided by the Labour-led government since 2000 has been increases in the Working for Families Tax Credits.[11] To illustrate the effect of reforms to family tax credits on the increases in net incomes, the effect of changes to family tax credits as well as changes to income tax rates is shown in Table 6. When the Working for Families reforms are taken into account, net incomes in New Zealand have grown at faster rates than increases in grow incomes.

Table 6 Percentage increase in wages net of family tax credits 2000 to 2006

Percentage of average hourly wage	Australia		New Zealand	
	Gross	Net	Gross	Net
75 Percent	34.3	37.0	22.1	34.8
100 Percent	34.3	40.4	22.1	34.7
150 Percent	34.3	37.1	22.1	27.5

Note: Based on 40 hours work per-week

Source: NZIER

Reform to the Australian Family Tax Benefits over this period has also meant that net incomes in Australia for families with eligible children have grown faster than gross incomes, and the rate of increase in incomes net of

[11] Nolan (2005). 'Targeting Families' Assistance: Evaluating Family and Employment Tax Credits in New Zealand's Tax-Benefit System', PhD Dissertation, Victoria University of Wellington School of Government

family tax credits has been larger in Australian than in New Zealand. Although the Working for Families reforms increased the net incomes of many families with children, reform to the Australian Family Tax Benefits over this period has outstripped the New Zealand reforms.[12]

The data in Table 6 appear to differ from that of the recent OECD Taxing Wages report, which argued that the tax wedge was lower in New Zealand than Australia. Yet rather than favourable fiscal settings in New Zealand, the OECD conclusions were driven by higher average wages in Australia. While the OECD tax wedge calculations may tell us if a person with a higher income in Australia would pay more tax or receive less assistance than a less well-off person in New Zealand, these calculations do not tell us what tax would be paid or assistance received by a family on the same income in both countries.

Table 7 Relative generosity of programmes ($NZ adjusted for PPP)

Percentage of average hourly wage	Australia (NZ$)				New Zealand (NZ$)			
	Gross Income	Income Tax	Family Tax Credits	Net Income	Gross Income	Income Tax	Family Tax Credits	Net Income
					2006			
75 Percent	683	111	245	818	649	125	199	723
100 Percent	911	179	225	957	865	187	160	839
150 Percent	1,366	316	134	1,185	1,298	339	74	1,034
					2000			
75 Percent	584	99	183	668	531	101	105	536
100 Percent	778	157	128	750	708	138	52	623
150 Percent	1,168	287	76	957	1,063	252	0	811

Note: Based on 2006 Australian personal income tax scale and Australian Family Tax Benefits, current New Zealand personal income tax scale and Working for Families Tax Credits, assumes New Zealand average gross hourly wage, Australian wage equals New Zealand wage adjusted for purchasing power parity, 40 hours work per-week and single income partnered house with two children under 12, figures rounded to nearest dollar, PPP rates of 0.95 for 2006 and 0.91 for 2000

Source: NZIER

Adjusting the OECD calculations for differences in average wages supports the conclusion that at the same income wages are generally taxed more

[12] Nolan (2006). 'Tax Relief for Breadwinners of Caregivers: The Designs of Earned and Child Tax Credits in Five Anglo-American Countries', *Journal of Comparative Policy Analysis*, Vol. 8, No. 2, pp 167-183

highly and the levels of tax credits provided lower in New Zealand than in Australia.[13] To illustrate, Table 7 shows that after adjusting for differences in purchasing power, at an average hourly wage in New Zealand income taxes are higher and family tax credits lower than in Australia. The same conclusion arises for people receiving 75 or 150 percent of this wage rate.

5. Conclusion

This paper discussed the effect of fiscal drag on trans-Tasman income differentials. Key findings included:

- fiscal drag in New Zealand since 1 April 2000 can be estimated as being in the order of an additional $1 billion dollars in income tax revenue per-annum
- since 2000 Australia has increased tax thresholds and reduced tax rates. The top personal income tax threshold has increased from AU$60,000 to a proposed AU$180,000 in 2008. The lower personal rate (applying immediately above the tax-free threshold) has reduced from 17 to 15 percent. These tax changes have largely offset the effects of fiscal drag in their income tax system
- between 2000 and 2006 the gross average hourly wage in Australia increased by 34.3 percent and the average net income increased at a similar rate
- between 2000 and 2006 the gross average hourly wage in New Zealand increased by 22.1 percent. Net incomes have grown at a slower rate. Fiscal drag has amplified the growth in trans-Tasman income differentials (particularly for people earning above average hourly wage)
- at the same income in both countries and after adjusting for purchasing power, wages are generally taxed more highly and the levels of family tax credits provided lower in New Zealand.

Closing the income gap with Australia requires incomes in New Zealand to grow at a rate faster than we have seen in the recent past. This requires an environment that rewards productive activities and that attracts and retains skilled workers in increasingly competitive and global labour markets. Without this environment pressure on the personal income tax base and, *ceteris paribus*, the economic cost per dollar of personal income tax revenue collected will continue to rise. Tackling increasing personal income tax burdens would thus seem a sensible place to begin to arrest the trend for incomes in New Zealand to slip further behind those in Australia.

[13] Nolan (2007). 'Lifting Families' Incomes', *Policy Quarterly*, Institute of Policy Studies, Vol. 3, No. 2, Wellington