

Tax Reform: paying attention to basic principles

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Abstract:

The incidence of personal taxation can be understood more clearly through an accounting process that carefully applies the principles of horizontal equity to a country's tax scales.

Personal taxation – and the associated transfer system that applies vertical equity principles to support those with special needs – can be made simpler, more efficient, and more equitable, once we better appreciate the differences between nominal and underlying taxation.

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Tax reform is always a topical issue, and in 2010 it seems so more than in most years, with major reviews and policy initiatives on both sides of the Tasman Sea. Popular tax debates remain intensely political, with each pundit's idea of reform largely coinciding with policies that raise their own after-tax incomes, and being able to interpret that extra revenue as hard-won earnings rather than as a "hand-out". We generally like to interpret our incomes as being a measure of our private economic worth, and not as a consequence of collective endeavour.

In addition to concerns about fairness,¹ tax review committees routinely present us with the mandatory economic goals of increased growth, productivity, and international competitiveness.² We have come to expect tax reform to advance these macroeconomic objectives, or at least not hinder their achievement, as if economic growth was the only principle that mattered. Such principles have, for example, guided the 2010 New Zealand reforms, announced in the 20 May 2010 Budget,³ and due to be implemented, in large part, in October 2010.

¹ Attitudes to "fairness" in New Zealand appear to be changing. Whereas "fair" used to mean low amounts of inequality, in a recent survey half of New Zealanders favoured people paying an equal share of their income in taxes ("All things being equal", *NZ Listener*, 1-7 May 2010).

² Recent examples: "A Tax System for New Zealand's Future", Report of the Victoria University of Wellington Tax Working Group, 20 January 2010 (www.victoria.ac.nz/sacl/cagtr/pdf/tax-report-website.pdf); "Closing the income gap with Australia by 2025", First Report and Recommendations 2025 Taskforce, 30 November 2009 (www.2025taskforce.govt.nz/pdfs/2025tf-1streport-nov09.pdf).

³ Bill English (Minister of Finance), Budget Speech, 20 May 2010 (http://www.treasury.govt.nz/budget/2010/speech/00.htm#_tocPerformance)

In this paper, I will set out two key principles of equity, and three of efficiency. I will then apply those principles to the tasks of administrative reform, accounting reform, and policy reform of a country's tax-benefit system.

Equity Principles:

- Horizontal equity means to treat equal individuals equally.⁴ All adult permanent residents have equal democratic and economic rights, so should be treated equally by our principal rules of taxation.
- Vertical equity means to treat unequals unequally.⁵ Vertical equity is about ameliorating inequalities that arise from circumstances of birth or misfortune. It is appropriate for specific assistance to be addressed at the level of the household rather than at the level of the individual. This is the arena of social welfare assistance.

Principles for an efficient tax system:

- Economic choices – what to consume, how much to save, how much time to spend in paid work, what occupation to pursue – should be made for reasons other than to avoid tax. Thus taxes should be non-distortionary; or at least incur as few deadweight costs as possible.
- Taxation systems acknowledge both private and public property rights. Public property rights might be seen to some as a consistent legal appropriation of what would otherwise be considered private income. To others public property rights represent a primary claim to a share of national income, based on the contribution of public factors to gross domestic product.
- An efficient tax regime should not act as a means for one country to create an artificial competitive advantage for itself. Taxes in one country should not undermine efficient international commerce by creating competitive disadvantages for other countries.

Administrative Reform

In New Zealand, there is one government agency that collects taxes – the Inland Revenue Department (IRD) – and multiple agencies – IRD, Work and Income (WINZ), Studylink – that pay benefits on the basis of household circumstances.

If the IRD were to conduct its operations fully on the basis of horizontal equity – levying taxes from individuals on an equal basis, and paying tax credits only on an individual and universal basis – then that agency would need to keep no information about anyone that relates to their

⁴ Glossary: <http://glossary.econguru.com/economic-term/horizontal+equity>

⁵ Glossary: <http://glossary.econguru.com/economic-term/vertical+equity>

family or other circumstances. Further the task of a revenue-gathering agency, if it eschews vertical equity issues, becomes relatively uncomplicated. Simplicity, in itself, reduces opportunities for tax avoidance.

Traditional personal tax scales incorporate large elements of vertical equity, through the use of concessionary tax rates levied on low levels of income.⁶ In addition, in New Zealand, the IRD manages a system of "family tax credits" – Working for Families – that provides unequal benefits for families (not individuals) on the basis of their different incomes.⁷ Administrative reform would require the transfer of the administration of Working for Families to WINZ.

This approach advocated – for the IRD to only deal with individuals, and to only apply the principles of horizontal equity – is to leave all payments that correct for vertical inequity to a welfare agency (or agencies). Thus only WINZ would need to store information about clients' family circumstances. Further, so long as student assistance is dependent in part on the family circumstances of students seeking financial support, then Studylink could be usefully merged with WINZ. Indeed student allowances have evolved in New Zealand to become administratively similar to primary benefits such as those paid by WINZ for unemployment and sickness, and identical in amount paid.⁸

Following administrative reform, the IRD would serve only as a collection agent for Child Support, one of its other current tasks. Liable parent contributions – based on family circumstances – would be determined by the agency which holds the relevant information.

Accounting Reform

Public accounting reform is required to determine the difference between "underlying" tax debits and credits, and the "headline" amounts.⁹ In other words, the economic burdens and benefits of taxation may fall differently from the ways they are administered, especially if tax administrators mix horizontal and vertical equity requirements – a mixture that will inevitably confused and possibly expedient.

⁶ These tax concessions started out as exemptions. See Paul Goldsmith (2008) *We Won, You Lost. Eat That!: A Political History of Tax in New Zealand Since 1840*; Auckland : David Ling; Rob Vosslander (2009) "How Much? Taxation on New Zealanders' Employment Income 1893-1984" *New Zealand Journal of Taxation Law and Policy* 15(4):315-321.

⁷ www.workingforfamilies.govt.nz

⁸ Budget 2010 Tax Guide (www.taxguide.govt.nz/benefit.aspx)

⁹ The terminologies here derive from Reserve Bank usage with respect to inflation rates (see www.rbnz.govt.nz/research/search/article.asp?id=3536). An alternative nomenclature would be to describe statutory taxation as nominal, with a principled accounting approach being used to assess what is "real public revenue". This distinction is used widely within our System of National Accounts – vis real versus nominal gross domestic product – and in other contexts such as "real wages", "real interest rates" and "real exchange rates".

The requirement for horizontal equity to be paramount is well accepted with respect to indirect taxation. Goods and services tax, for example, is levied at a single rate. Further, the need to distinguish underlying from nominal taxation is well understood in economics texts. An excise tax on petrol, for example, is paid by the retailers but the incidence of that tax is generally understood to fall principally (but not entirely) on the consumer. With personal income tax we tend to think of its incidence as falling entirely on private individuals, despite the fact that, since the introduction of PAYE¹⁰, the actual payments have been made by business firms.

For tax accounting reform, the two critical principles are those of horizontal equity and of property rights. Taxation in general recognises that there is such a thing as a public property right that coexists with and complements private property rights. The philosophical underpinnings of the public property right need urgent clarification. What matters, here, is that taxation could not exist in the absence of such a right.

Income taxation debits, following the principles of horizontal equity, represents the levying of a specified percentage of all income to the Crown¹¹ as a public property right; a percentage that, conceivably, could be as low as 0% or as high as 100%. Levying different percentages on different people is not consistent with horizontal equity.

In addition, it is consistent with horizontal equity principles to pay equal tax credits to everybody.¹² Tax credits could be any amount – including zero – so long as the amount is the same for all. Such payments represent dividends from public funds. All citizens are equal beneficiaries of the government's consolidated fund.

Statutory taxation, with its concessionary rates and (in some jurisdictions) exemptions, does not conform with horizontal equity principles. The task here is to find the most appropriate "underlying rate" of income tax, and to account for tax concessions as a form of benefit.¹³ From 1988 to 2000, and again from 2010, New Zealand's top personal tax rate has been 33%. In addition the trust rate has been 33%, even including the years 2000-10. Further, for most of

¹⁰ Pay as you earn.

¹¹ Alternatively "sovereign", "state", "government". There are important subtextual differences in the choice of word.

¹² "Everybody" would normally exclude children (as minors) and non-residents. For now at least, I will follow these exclusions. For our purposes, those not excluded are "tax-resident citizens" (citizens for short), noting that this is a wider definition of "citizen" than would apply, for example, to a nation's passport-issuing authority.

¹³ The word benefit is a useful one, in that it easily encompasses both of the distinct concepts of "transfer" ("handout" in popular terminology) and "dividend". The transfer concept relates to vertical equity; the dividend concept to horizontal equity.

the period from 1988, the company tax rate has been set at 33%. This suggests that 33% is the best candidate as the underlying rate of income taxation in New Zealand.

In 2000, the top personal tax bracket was split, with a new top rate of 39% levied on annual earnings over \$60,000. The new rate would initially affect about five percent of taxpayers.¹⁴ In 2000, that rate had the characteristics of a high income tax surcharge, much as the top marginal rate in Australia (45%) does, becoming effective at a high \$180,000 annual income threshold. The top tax bracket in New Zealand no longer qualifies as a high income tax surcharge. It now affects over 10% of tax payers,¹⁵ and that proportion will increase with inflation (albeit low inflation) in the coming years.

In addition to normal income taxation, New Zealanders pay ACC (accident compensation) levies at a rate of 2% for most employees,¹⁶ with variable rates for employers and self-employed persons. This levy is an income tax by another name, and its incidence closely follows horizontal equity principles for employees, with a more differentiated approach adopted towards employers, based on the accident risks associated with the industry categories that businesses fall into.

For this paper, 35% will be presented as the underlying rate of income tax; comprised of 33% normal tax, and 2% ACC levy.¹⁷ At 35%, and using statutory (nominal) accounting, from October 2010 all citizens will be liable to pay an average tax rate that is less than the 35% underlying rate. In the period April-September 2010, only a very small number of high earning citizens (those earning over \$275,000 per year) will pay average taxes above 35%. From October 2010, all persons' average rates of income tax fall below 33%, given the regressive nature of the ACC levy.

Tables 1a and 1b show the April and October nominal incidence of personal taxation, for incomes from \$0 to \$10,000 per week, plus WINZ transfers that a representative individual (Cathy, without children) would be entitled to.¹⁸ Marginal tax rates are statutory rates plus the 2% ACC levy through the income range (\$0-\$110,018) for which that levy is applied. A quirk

¹⁴ Craig Howie "Higher tax rate raises more cash than forecast" *The Dominion* 23 August 2001.

¹⁵ Budget 2010 "Key Facts for Taxpayers" (www.treasury.govt.nz/budget/2010/taxpayers/b10-taxpayers.pdf). Projections for the year to March 2011 show 12% of taxpayers earning more than \$70,000, the threshold for the 38% tax rate that will be abolished in October 2010.

¹⁶ The average rate of ACC levy falls for employees earning over \$110,018 per year.

¹⁷ The Australian "Henry Report" argues for incorporation of all tax-like levies (eg the 1.5% Medicare levy) (taxreview.treasury.gov.au/content/Content.aspx?doc=html/pubs_reports.htm).

¹⁸ Cathy is aged 30, lives in Wellington, and pays \$140 per week rent. Below certain income and hours of work thresholds, Cathy may be entitled to, from WINZ, an Unemployment Benefit and an Accommodation Supplement.

that shows up for the \$900 per week income is the abatement of the IETC¹⁹ that was introduced in April 2009. The abatement of this \$10 per week tax credit adds 13% to the marginal tax rate for the annual income range \$44,000-48,000.

| weekly \$ gross | nominal after tax | average tax per \$ | marginal tax per \$ | annual \$ gross | nominal after tax | benefits* | disposable income** |
|--------------------|----------------------|-----------------------|------------------------|--------------------|----------------------|-----------|------------------------|
| 0 | 0 | | | 0 | 0 | 13,407 | 13,407 |
| 100 | 86 | 14.5% | 14.5% | 5,200 | 4,446 | 12,517 | 16,963 |
| 200 | 171 | 14.5% | 14.5% | 10,400 | 8,892 | 8,788 | 17,680 |
| 300 | 254 | 15.4% | 23.0% | 15,600 | 13,202 | 5,196 | 18,398 |
| 400 | 331 | 17.3% | 23.0% | 20,800 | 17,206 | 2,766 | 19,972 |
| 500 | 418 | 16.4% | 23.0% | 26,000 | 21,730 | 1,466 | 23,196 |
| 600 | 495 | 17.5% | 23.0% | 31,200 | 25,734 | 166 | 25,900 |
| 700 | 572 | 18.3% | 23.0% | 36,400 | 29,738 | 0 | 29,738 |
| 800 | 649 | 18.9% | 23.0% | 41,600 | 33,742 | 0 | 33,742 |
| 900 | 719 | 20.1% | 36.0% | 46,800 | 37,382 | 0 | 37,382 |
| 1,000 | 784 | 21.6% | 35.0% | 52,000 | 40,750 | 0 | 40,750 |
| 1,200 | 914 | 23.9% | 35.0% | 62,400 | 47,510 | 0 | 47,510 |
| 1,400 | 1,041 | 25.6% | 40.0% | 72,800 | 54,130 | 0 | 54,130 |
| 1,600 | 1,161 | 27.4% | 40.0% | 83,200 | 60,370 | 0 | 60,370 |
| 1,800 | 1,281 | 28.8% | 40.0% | 93,600 | 66,610 | 0 | 66,610 |
| 2,000 | 1,401 | 30.0% | 40.0% | 104,000 | 72,850 | 0 | 72,850 |
| 2,200 | 1,523 | 30.8% | 38.0% | 114,400 | 79,178 | 0 | 79,178 |
| 3,000 | 2,019 | 32.7% | 38.0% | 156,000 | 104,970 | 0 | 104,970 |
| 4,000 | 2,639 | 34.0% | 38.0% | 208,000 | 137,210 | 0 | 137,210 |
| 5,000 | 3,259 | 34.8% | 38.0% | 260,000 | 169,450 | 0 | 169,450 |
| 5,288 | 3,437 | 35.0% | 38.0% | 275,000 | 178,750 | 0 | 178,750 |
| 10,000 | 6,359 | 36.4% | 38.0% | 520,000 | 330,650 | 0 | 330,650 |

* WINZ transfers only
 ** including benefits payable to representative individual "Cathy"

¹⁹ Independent Earner Tax Credit; refer Keith Rankin (2009) "Personal Tax Cuts and Recession Assistance Policies: 2009-2011", New Zealand Journal of Taxation Law and Policy 15(1):9-16.

| Table 1b: Earnings and Disposable Income, October 2010 | | | | | | | |
|---|-----------------------------|-----------------------|------------------------|--------------------|-----------------------------|-----------|------------------------|
| weekly \$ gross | nominal after tax | average tax per \$ | marginal tax per \$ | annual \$ gross | nominal after tax | benefits* | disposable income** |
| 0 | 0 | | | 0 | 0 | 13,610 | 13,610 |
| 100 | 88 | 12.5% | 12.5% | 5,200 | 4,550 | 12,750 | 17,300 |
| 200 | 175 | 12.5% | 12.5% | 10,400 | 9,100 | 9,031 | 18,131 |
| 300 | 260 | 13.2% | 19.5% | 15,600 | 13,538 | 5,423 | 18,961 |
| 400 | 341 | 14.8% | 19.5% | 20,800 | 17,724 | 2,766 | 20,490 |
| 500 | 431 | 13.7% | 19.5% | 26,000 | 22,430 | 1,466 | 23,896 |
| 600 | 512 | 14.7% | 19.5% | 31,200 | 26,616 | 166 | 26,782 |
| 700 | 592 | 15.4% | 19.5% | 36,400 | 30,802 | 0 | 30,802 |
| 800 | 673 | 15.9% | 19.5% | 41,600 | 34,988 | 0 | 34,988 |
| 900 | 746 | 17.1% | 32.5% | 46,800 | 38,810 | 0 | 38,810 |
| 1,000 | 814 | 18.6% | 32.0% | 52,000 | 42,340 | 0 | 42,340 |
| 1,200 | 950 | 20.8% | 32.0% | 62,400 | 49,412 | 0 | 49,412 |
| 1,400 | 1,085 | 22.5% | 35.0% | 72,800 | 56,400 | 0 | 56,400 |
| 1,600 | 1,215 | 24.1% | 35.0% | 83,200 | 63,160 | 0 | 63,160 |
| 1,800 | 1,345 | 25.3% | 35.0% | 93,600 | 69,920 | 0 | 69,920 |
| 2,000 | 1,475 | 26.3% | 35.0% | 104,000 | 76,680 | 0 | 76,680 |
| 2,200 | 1,606 | 27.0% | 33.0% | 114,400 | 83,528 | 0 | 83,528 |
| 3,000 | 2,142 | 28.6% | 33.0% | 156,000 | 111,400 | 0 | 111,400 |
| 4,000 | 2,812 | 29.7% | 33.0% | 208,000 | 146,240 | 0 | 146,240 |
| 5,000 | 3,482 | 30.4% | 33.0% | 260,000 | 181,080 | 0 | 181,080 |
| 5,288 | 3,676 | 30.5% | 33.0% | 275,000 | 191,130 | 0 | 191,130 |
| 10,000 | 6,832 | 31.7% | 33.0% | 520,000 | 355,280 | 0 | 355,280 |

* WINZ transfers only
** including benefits payable to representative individual "Cathy"

Tables 2a and 2b replace nominal tax rates and after-tax incomes with the underlying rates and incomes, by applying the 35% underlying rate of income tax. Given that disposable income remains unchanged – this is accounting reform only – the accounting difference appears in the "benefits" column as implicit tax credits. Table 2a shows that individuals earning less than \$110,000 per year in 2010, receive annual benefits in excess of \$5,000. The principal difference in benefits between higher and lower income earners lies within the mix – tax credit versus WINZ transfer – rather than the amounts. Table 2b presents the same information for the new October 2010 tax scale. It reveals a significant increase in underlying tax credits, especially but not only to very high income recipients who do not pay ACC levies on their marginal earnings.

Table 2a: Earnings and Disposable Income, April 2010

| weekly \$ gross | underlying after tax | average tax per \$ | marginal tax per \$ | annual \$ gross | underlying after tax | benefits* | disposable income** |
|--------------------|--------------------------------|-----------------------|------------------------|--------------------|--------------------------------|--------------|------------------------|
| 0 | 0 | | | 0 | 0 | 13,407 | 13,407 |
| 100 | 65 | 35.0% | 35.0% | 5,200 | 3,380 | 13,583 | 16,963 |
| 200 | 130 | 35.0% | 35.0% | 10,400 | 6,760 | 10,920 | 17,680 |
| 300 | 195 | 35.0% | 35.0% | 15,600 | 10,140 | 8,258 | 18,398 |
| 400 | 260 | 35.0% | 35.0% | 20,800 | 13,520 | 6,452 | 19,972 |
| 500 | 325 | 35.0% | 35.0% | 26,000 | 16,900 | 6,296 | 23,196 |
| 600 | 390 | 35.0% | 35.0% | 31,200 | 20,280 | 5,620 | 25,900 |
| 700 | 455 | 35.0% | 35.0% | 36,400 | 23,660 | 6,078 | 29,738 |
| 800 | 520 | 35.0% | 35.0% | 41,600 | 27,040 | 6,702 | 33,742 |
| 900 | 585 | 35.0% | 35.0% | 46,800 | 30,420 | 6,962 | 37,382 |
| 1,000 | 650 | 35.0% | 35.0% | 52,000 | 33,800 | 6,950 | 40,750 |
| 1,200 | 780 | 35.0% | 35.0% | 62,400 | 40,560 | 6,950 | 47,510 |
| 1,400 | 910 | 35.0% | 35.0% | 72,800 | 47,320 | 6,810 | 54,130 |
| 1,600 | 1,040 | 35.0% | 35.0% | 83,200 | 54,080 | 6,290 | 60,370 |
| 1,800 | 1,170 | 35.0% | 35.0% | 93,600 | 60,840 | 5,770 | 66,610 |
| 2,000 | 1,300 | 35.0% | 35.0% | 104,000 | 67,600 | 5,250 | 72,850 |
| 2,200 | 1,430 | 35.0% | 35.0% | 114,400 | 74,360 | 4,818 | 79,178 |
| 3,000 | 1,950 | 35.0% | 35.0% | 156,000 | 101,400 | 3,570 | 104,970 |
| 4,000 | 2,600 | 35.0% | 35.0% | 208,000 | 135,200 | 2,010 | 137,210 |
| 5,000 | 3,250 | 35.0% | 35.0% | 260,000 | 169,000 | 450 | 169,450 |
| 5,288 | 3,437 | 35.0% | 35.0% | 275,000 | 178,750 | 0 | 178,750 |
| 10,000 | 6,500 | 35.0% | 35.0% | 520,000 | 338,000 | -7,350 | 330,650 |

* WINZ transfers plus implicit tax credits

** including benefits payable to representative individual "Cathy"

Table 2b: Earnings and Disposable Income, October 2010

| weekly \$ gross | underlying after tax | average tax per \$ | marginal tax per \$ | annual \$ gross | underlying after tax | benefits* | disposable income** |
|--------------------|--------------------------------|-----------------------|------------------------|--------------------|--------------------------------|--------------|------------------------|
| 0 | 0 | | | 0 | 0 | 13,610 | 13,610 |
| 100 | 65 | 35.0% | 35.0% | 5,200 | 3,380 | 13,920 | 17,300 |
| 200 | 130 | 35.0% | 35.0% | 10,400 | 6,760 | 11,371 | 18,131 |
| 300 | 195 | 35.0% | 35.0% | 15,600 | 10,140 | 8,821 | 18,961 |
| 400 | 260 | 35.0% | 35.0% | 20,800 | 13,520 | 6,970 | 20,490 |
| 500 | 325 | 35.0% | 35.0% | 26,000 | 16,900 | 6,996 | 23,896 |
| 600 | 390 | 35.0% | 35.0% | 31,200 | 20,280 | 6,502 | 26,782 |
| 700 | 455 | 35.0% | 35.0% | 36,400 | 23,660 | 7,142 | 30,802 |
| 800 | 520 | 35.0% | 35.0% | 41,600 | 27,040 | 7,948 | 34,988 |
| 900 | 585 | 35.0% | 35.0% | 46,800 | 30,420 | 8,390 | 38,810 |
| 1,000 | 650 | 35.0% | 35.0% | 52,000 | 33,800 | 8,540 | 42,340 |
| 1,200 | 780 | 35.0% | 35.0% | 62,400 | 40,560 | 8,852 | 49,412 |
| 1,400 | 910 | 35.0% | 35.0% | 72,800 | 47,320 | 9,080 | 56,400 |
| 1,600 | 1,040 | 35.0% | 35.0% | 83,200 | 54,080 | 9,080 | 63,160 |
| 1,800 | 1,170 | 35.0% | 35.0% | 93,600 | 60,840 | 9,080 | 69,920 |
| 2,000 | 1,300 | 35.0% | 35.0% | 104,000 | 67,600 | 9,080 | 76,680 |
| 2,200 | 1,430 | 35.0% | 35.0% | 114,400 | 74,360 | 9,168 | 83,528 |
| 3,000 | 1,950 | 35.0% | 35.0% | 156,000 | 101,400 | 10,000 | 111,400 |
| 4,000 | 2,600 | 35.0% | 35.0% | 208,000 | 135,200 | 11,040 | 146,240 |
| 5,000 | 3,250 | 35.0% | 35.0% | 260,000 | 169,000 | 12,080 | 181,080 |
| 5,288 | 3,437 | 35.0% | 35.0% | 275,000 | 178,750 | 12,380 | 191,130 |
| 10,000 | 6,500 | 35.0% | 35.0% | 520,000 | 338,000 | 17,280 | 355,280 |

* WINZ transfers plus implicit tax credits

** including benefits payable to representative individual "Cathy"

Inspection of the above tables leads to the conclusion that there is a large degree of horizontal equity already embodied in our existing benefit payments. Of particular significance is the underlying tax credits payable to persons whose present marginal tax rate is equal to the underlying tax rate (35%). For April 2010, that means persons in the annual income range \$48,000 to \$70,000; and for October 2010 that means persons in the annual income range \$70,000 to \$110,000.

The following equations apply for the income ranges stated above:

1. Disposable Income = 65% of Gross Earnings + \$6,950 (April 2010)
2. Disposable Income = 65% of Gross Earnings + \$9,080 (October 2010)

Within these income ranges, full horizontal equity applies to both the tax rate (35%) and the respective benefit amounts (\$6,950; \$9,080). Thus the "tax cut" to a person grossing \$70,000 is in fact an annual benefit increase of \$2,130 (\$41 pw). For the purposes of this article I will call this benefit (eg \$9,080 from October 2010) the Equitable Tax Credit (ETC), meaning the implicit tax credit that emerges from the application of the horizontal equity principle to our current tax-benefit scales. The problem revealed is that, while all taxpayers receive substantial implicit benefits, some receive less than the ETC and some higher income recipients will receive benefits greater than the ETC. There is no equity principle to justify these differences.

Proponents of tax reform in the direction of the recommendations of the Victoria University Tax Working Group suggest that the Budget 2010 alignment of the top personal rate with the trust rate (33% excluding ACC) – and the reduction of the company rate to 28% in April 2011 – is the first stage of a reform process that will end with a triple alignment²⁰ at somewhere between 20% and 28% (exclusive of ACC levies).²¹ If this is so, and we realistically take the higher rate of 28%, such a reform would reduce the underlying tax rate from 35% to 30%,²² by 2016,²³ say. That would represent a significant reduction in the public share of national income.²⁴

²⁰ Alignment of the company, trust, and top personal tax rates (Tax Working Group 2010), at the underlying rate of income tax.

²¹ John Shewan, "Vital first step to a 25pc top rate", *Dominion Post*, 21 May 2010.

²² I will also assume that, in the spirit of proportional taxation (and the Australian Henry Report), the regressive aspect of ACC employee levies will be abolished, meaning that the 30% employee marginal tax rate (including ACC levy) will apply, in 2016, to all wage and salary incomes over \$48,000 per annum.

²³ Shewan's 2013-14 time frame for a triple alignment at an underlying rate below 25% is quite unrealistic, especially considering that an election is scheduled for late 2014. The National Party was unwilling to propose a top personal tax rate of below 37% in its 2008 election manifesto (Rankin 2009, *op. cit.*)

²⁴ It might be considered a breach of the third efficiency principle cited above. Such low company and personal tax rates invite competitive responses from other nations, and such a change, with its reduced recognition of public property rights, potentially lead towards public impoverishment.

| Table 3a: Earnings and Disposable Income, April 2016 (scenario) | | | | | | | |
|--|----------------------|-----------------------|------------------------|--------------------|----------------------|-----------|------------------------|
| weekly \$ gross | nominal after tax | average tax per \$ | marginal tax per \$ | annual \$ gross | nominal after tax | benefits* | disposable income** |
| 0 | 0 | | | 0 | 0 | 15,801 | 15,801 |
| 100 | 88 | 12.5% | 12.5% | 5,200 | 4,550 | 14,857 | 19,407 |
| 200 | 175 | 12.5% | 12.5% | 10,400 | 9,100 | 11,137 | 20,237 |
| 300 | 260 | 13.2% | 19.5% | 15,600 | 13,538 | 7,530 | 21,068 |
| 400 | 341 | 14.8% | 19.5% | 20,800 | 17,724 | 4,434 | 22,158 |
| 500 | 431 | 13.7% | 19.5% | 26,000 | 22,430 | 3,175 | 25,605 |
| 600 | 512 | 14.7% | 19.5% | 31,200 | 26,616 | 1,875 | 28,491 |
| 700 | 592 | 15.4% | 19.5% | 36,400 | 30,802 | 575 | 31,377 |
| 800 | 673 | 15.9% | 19.5% | 41,600 | 34,988 | 0 | 34,988 |
| 900 | 746 | 17.1% | 32.5% | 46,800 | 38,810 | 0 | 38,810 |
| 1,000 | 816 | 18.4% | 30.0% | 52,000 | 42,420 | 0 | 42,420 |
| 1,200 | 956 | 20.4% | 30.0% | 62,400 | 49,700 | 0 | 49,700 |
| 1,400 | 1,096 | 21.7% | 30.0% | 72,800 | 56,980 | 0 | 56,980 |
| 1,600 | 1,236 | 22.8% | 30.0% | 83,200 | 64,260 | 0 | 64,260 |
| 1,800 | 1,376 | 23.6% | 30.0% | 93,600 | 71,540 | 0 | 71,540 |
| 2,000 | 1,516 | 24.2% | 30.0% | 104,000 | 78,820 | 0 | 78,820 |
| 2,200 | 1,656 | 24.7% | 30.0% | 114,400 | 86,100 | 0 | 86,100 |
| 3,000 | 2,216 | 26.1% | 30.0% | 156,000 | 115,220 | 0 | 115,220 |
| 4,000 | 2,916 | 27.1% | 30.0% | 208,000 | 151,620 | 0 | 151,620 |
| 5,000 | 3,616 | 27.7% | 30.0% | 260,000 | 188,020 | 0 | 188,020 |
| 10,000 | 7,116 | 28.8% | 30.0% | 520,000 | 370,020 | 0 | 370,020 |

* WINZ transfers only
** including benefits payable to representative individual "Cathy"

To see what such a reform might look like, I present, in Tables 3a and 3b, how proposals in the 2015 Budget might look, set for implementation in 2016. It is clear that the basic structure outlined on 20 May 2010 is intended to change very little in the medium term. The 2016 prognosis presented here simply updates WINZ benefits by 2% per year (in line with the Reserve Bank's inflation target) and raises Cathy's rent by 4% per year (assuming real economic growth per capita of 2% per year, and that rents keep up with that).

| Table 3b: Earnings and Disposable Income, April 2016 (scenario) | | | | | | | |
|--|--------------------------------|-----------------------|------------------------|--------------------|--------------------------------|-----------|------------------------|
| weekly \$ gross | underlying after tax | average tax per \$ | marginal tax per \$ | annual \$ gross | underlying after tax | benefits* | disposable income** |
| 0 | 0 | | | 0 | 0 | 15,801 | 15,801 |
| 100 | 70 | 30.0% | 30.0% | 5,200 | 3,640 | 15,767 | 19,407 |
| 200 | 140 | 30.0% | 30.0% | 10,400 | 7,280 | 12,957 | 20,237 |
| 300 | 210 | 30.0% | 30.0% | 15,600 | 10,920 | 10,148 | 21,068 |
| 400 | 280 | 30.0% | 30.0% | 20,800 | 14,560 | 7,598 | 22,158 |
| 500 | 350 | 30.0% | 30.0% | 26,000 | 18,200 | 7,405 | 25,605 |
| 600 | 420 | 30.0% | 30.0% | 31,200 | 21,840 | 6,651 | 28,491 |
| 700 | 490 | 30.0% | 30.0% | 36,400 | 25,480 | 5,897 | 31,377 |
| 800 | 560 | 30.0% | 30.0% | 41,600 | 29,120 | 5,868 | 34,988 |
| 900 | 630 | 30.0% | 30.0% | 46,800 | 32,760 | 6,050 | 38,810 |
| 1,000 | 700 | 30.0% | 30.0% | 52,000 | 36,400 | 6,020 | 42,420 |
| 1,200 | 840 | 30.0% | 30.0% | 62,400 | 43,680 | 6,020 | 49,700 |
| 1,400 | 980 | 30.0% | 30.0% | 72,800 | 50,960 | 6,020 | 56,980 |
| 1,600 | 1,120 | 30.0% | 30.0% | 83,200 | 58,240 | 6,020 | 64,260 |
| 1,800 | 1,260 | 30.0% | 30.0% | 93,600 | 65,520 | 6,020 | 71,540 |
| 2,000 | 1,400 | 30.0% | 30.0% | 104,000 | 72,800 | 6,020 | 78,820 |
| 2,200 | 1,540 | 30.0% | 30.0% | 114,400 | 80,080 | 6,020 | 86,100 |
| 3,000 | 2,100 | 30.0% | 30.0% | 156,000 | 109,200 | 6,020 | 115,220 |
| 4,000 | 2,800 | 30.0% | 30.0% | 208,000 | 145,600 | 6,020 | 151,620 |
| 5,000 | 3,500 | 30.0% | 30.0% | 260,000 | 182,000 | 6,020 | 188,020 |
| 10,000 | 7,000 | 30.0% | 30.0% | 520,000 | 364,000 | 6,020 | 370,020 |

* WINZ transfers plus tax credits
** including benefits payable to representative individual "Cathy"

The following equation would apply for all employee incomes over \$48,000:

$$3. \quad \text{Disposable Income} = 70\% \text{ of Gross Earnings} + \$6,020 \quad (\text{April 2016})$$

In this hypothetical 2016 case there is a clear shift in the private-public income balance, in favour of private incomes. It also shows a tax regime with near perfect horizontal equity. Almost everyone receives an annual benefit of \$6,020 or greater. (Those that do not, with annual incomes *circa* \$40,000, receive a benefit of just under \$6,000.) These numbers reveal a dividend, from public funds, of approximately \$6,000 per year. Higher levels of benefit – that is, in this case, for persons earning less than \$35,000 per year – would be accounted for as "vertical equity" transfers, and should be paid by an agency other than WINZ.

The horizontal equity principal of "flat-rate taxation" is not an argument for low rates of tax. There is nothing in my argument that suggests a flat tax rate of 30% is fairer or more efficient than a tax rate of 40% or 20%; or that universal payment of an Equitable Tax Credit²⁵ of \$6,020 is preferable to an ETC of \$6,950 or \$9,080. Other principles that evaluate the respective merits of private and public property rights, must be deployed to determine the

²⁵ An example of a "refundable tax credit" (or "refundable tax offset"; Australian Tax Office www.ato.gov.au/individuals/content.asp?doc=/content/19605.htm), which, if applied universally, would exceed gross earnings for some recipients. Australia's LITO – Low Income Tax Offset – generally works as a non-refundable tax credit, meaning that the benefit paid cannot exceed gross earnings.

efficient balance between aggregate private and aggregate public income. What our accounting reform suggests, however, is that everyone's disposable income is sourced in part as a dividend from public funds.

How does our accounting reform apply to families with children? Applying the October 2010 tax scale to a representative family – Kate and Ken, Auckland, two children, \$600 per week mortgage²⁶ – yields Table 4a if only Ken, say, is in the paid workforce, and Kate is the children's caregiver.

Table 4a: Earnings and Disposable Income, October 2010

| weekly \$ gross | annual \$ gross | nominal after tax | earner transfers | underlying after 35% tax | underlying benefits* | partner** transfers | household disposable income*** |
|-----------------|-----------------|-------------------|------------------|--------------------------|----------------------|---------------------|--------------------------------|
| 0 | 0 | 0 | 14,432 | 0 | 14,432 | 22,916 | 37,348 |
| 200 | 10,400 | 9,100 | 11,999 | 6,760 | 14,339 | 20,732 | 41,832 |
| 400 | 20,800 | 17,724 | 8,392 | 13,520 | 12,596 | 17,092 | 43,208 |
| 600 | 31,200 | 26,616 | 4,960 | 20,280 | 11,296 | 17,084 | 48,660 |
| 800 | 41,600 | 34,988 | 3,660 | 27,040 | 11,608 | 14,830 | 53,477 |
| 1,000 | 52,000 | 42,340 | 2,880 | 33,800 | 11,420 | 11,450 | 56,669 |
| 1,200 | 62,400 | 49,412 | 1,580 | 40,560 | 10,432 | 8,070 | 59,061 |
| 1,400 | 72,800 | 56,400 | 280 | 47,320 | 9,360 | 4,690 | 61,369 |
| 1,600 | 83,200 | 63,160 | 0 | 54,080 | 9,080 | 2,330 | 65,490 |
| 1,800 | 93,600 | 69,920 | 0 | 60,840 | 9,080 | 250 | 70,170 |
| 2,000 | 104,000 | 76,680 | 0 | 67,600 | 9,080 | 0 | 76,680 |
| 2,200 | 114,400 | 83,528 | 0 | 74,360 | 9,168 | 0 | 83,528 |
| 2,400 | 124,800 | 90,496 | 0 | 81,120 | 9,376 | 0 | 90,496 |
| 2,600 | 135,200 | 97,464 | 0 | 87,880 | 9,584 | 0 | 97,464 |
| 2,800 | 145,600 | 104,432 | 0 | 94,640 | 9,792 | 0 | 104,432 |
| 3,000 | 156,000 | 111,400 | 0 | 101,400 | 10,000 | 0 | 111,400 |
| 4,000 | 208,000 | 146,240 | 0 | 135,200 | 11,040 | 0 | 146,240 |
| 5,000 | 260,000 | 181,080 | 0 | 169,000 | 12,080 | 0 | 181,080 |
| 6,000 | 312,000 | 215,920 | 0 | 202,800 | 13,120 | 0 | 215,920 |
| 10,000 | 520,000 | 355,280 | 0 | 338,000 | 17,280 | 0 | 355,280 |
| 11,000 | 572,000 | 390,120 | 0 | 371,800 | 18,320 | 0 | 390,120 |

* earner benefits: WINZ transfers plus implicit tax credits
 ** partner benefits: WINZ plus Working for Families transfers
 *** including all benefits payable to family "Kate & Ken"; 2 children (aged 16,12), 1 earner

The "nominal" column shows Ken's earnings after tax, using conventional accounting. "Earner transfers" represents a combination of Unemployment Benefit (UB) and Accommodation Supplement (AS) that Ken may be entitled to, depending on his income and hours of work. "Partner transfers" includes Kate's share of UB and AS entitlements, plus the family's Working for Families (WFF) transfers. Underlying earner benefits include implicit tax credits, derived as a residual after calculating underlying after-tax earnings.

The following equation applies for the income range \$74,000 to \$110,000:

²⁶ For example, a 25-year mortgage of \$400,000, at 6.1%.

4. Disposable Income = 65% of Gross Earnings + \$9,080 (October 2010)

\$9,080 is the Equitable Tax Credit for individuals from October 2010. Higher implicit tax credits for high earners result solely from the ACC levy cut-off at \$110,018 per annum.

In Table 4b, the family earning scenario changes: the "supplementary earner" scenario. For household incomes up to \$1,500 per week (\$78,000 per year), only Ken earns. For family incomes from \$1,500 to \$3,000 per week, additional earnings are made up by Kate, the secondary income earner; that is, Kate is the marginal earner in the \$1,500 to \$3,000 household income range. If the household earnings exceed \$3,000 per week, it is Ken, once again, who becomes the marginal earner. All WFF payments go to Kate, the designated caregiver of their children.

| Table 4b: Earnings and Disposable Income, October 2010 | | | | | | | household |
|---|----------------|-----------|------------|---------------|---------------|------------|-----------|
| weekly \$ | annual \$ | nominal | transfers* | underlying | underlying | disposable | |
| gross | gross | after tax | | after 35% tax | benefits** | income*** | |
| 0 | 0 | 0 | 37,348 | 0 | 37,348 | 37,348 | |
| 200 | 10,400 | 9,100 | 32,732 | 6,760 | 35,072 | 41,832 | |
| 400 | 20,800 | 17,724 | 25,484 | 13,520 | 29,688 | 43,208 | |
| 600 | 31,200 | 26,616 | 22,044 | 20,280 | 28,380 | 48,660 | |
| 800 | 41,600 | 34,988 | 18,489 | 27,040 | 26,437 | 53,477 | |
| 1,000 | 52,000 | 42,340 | 14,329 | 33,800 | 22,869 | 56,669 | |
| 1,200 | 62,400 | 49,412 | 9,649 | 40,560 | 18,501 | 59,061 | |
| 1,400 | 72,800 | 56,400 | 4,969 | 47,320 | 14,049 | 61,369 | |
| 1,600 | 83,200 | 64,330 | 2,330 | 54,080 | 12,580 | 66,660 | |
| 1,800 | 93,600 | 73,318 | 250 | 60,840 | 12,728 | 73,568 | |
| 2,000 | 104,000 | 82,210 | 0 | 67,600 | 14,610 | 82,210 | |
| 2,200 | 114,400 | 90,582 | 0 | 74,360 | 16,222 | 90,582 | |
| 2,400 | 124,800 | 98,590 | 0 | 81,120 | 17,470 | 98,590 | |
| 2,600 | 135,200 | 105,656 | 0 | 87,880 | 17,776 | 105,656 | |
| 2,800 | 145,600 | 112,728 | 0 | 94,640 | 18,088 | 112,728 | |
| 3,000 | 156,000 | 119,560 | 0 | 101,400 | 18,160 | 119,560 | |
| 4,000 | 208,000 | 153,760 | 0 | 135,200 | 18,560 | 153,760 | |
| 5,000 | 260,000 | 188,600 | 0 | 169,000 | 19,600 | 188,600 | |
| 6,000 | 312,000 | 223,440 | 0 | 202,800 | 20,640 | 223,440 | |
| 10,000 | 520,000 | 362,800 | 0 | 338,000 | 24,800 | 362,800 | |
| 11,000 | 572,000 | 397,640 | 0 | 371,800 | 25,840 | 397,640 | |

* WINZ plus Working for Families transfers
 ** WINZ plus Working for Families transfers, plus implicit tax credits
 *** including benefits payable to C7 "Kate & Ken"; 2 children (aged 16,12), supplementary earner scenario

The following equation applies for household incomes if both Kate and Ken have a nominal marginal tax rate equal to the underlying tax rate of 35%:

5. Disposable Income = 65% of Gross Earnings + \$18,160 (October 2010)

\$9,080 is the Equitable Tax Credit for individuals from October 2010. Because Kate and Ken are both earning, both receive implicit tax credits under the supplementary earner scenario (Table 4b), whereas under the single earner scenario (Table 4a), only Ken receives a benefit in the form of an implicit tax credit. If household earnings are \$3,000 per week (Table 4b) Kate and Ken are \$8,160 better off if their earnings are shared than if they are all attributed to Ken (Table 4a); two ETCs instead of one (offset in the single earner case by reduced ACC levies on incomes over \$110,018).

Tax Policy Reform

Policy reform follows from the fact that, once accounting reform is adopted, almost all households receive benefits that are close to or above the identified Equitable Tax Credit. The policy reform is to tax all tax-residents at the underlying rate (creating a private income stream at, say, 65% of gross earnings), and to pay all individual tax-residents the ETC, a benefit that is a dividend from the public revenue pool.

Low earners currently receiving benefits in excess of the ETC would qualify for a "vertical equity top-up" that would enable them to maintain household disposable incomes comparable with their present disposable incomes. In the 2016 scenario presented above (Tables 3a and 3b), this reform would be very easy to implement, because only a small number of people, earning around \$800 per week, receive implicit tax credits less than the ETC, and they would need to receive no more than \$4 per week extra to make up their shortfall.

Analysis of the October 2010 tables suggests that two groups receive implicit tax credits well below the identified ETC of \$9,080 (\$175 per week). First, it would appear that \$9,080 is too generous to pay as a universal tax credit; that amount is too big a big jump from the \$6,950 which applies to the period from April 2009 to September 2010. (Of the tax scales presented, while the 2016 one is the most horizontally equitable, the October 2010 scale is the least.)

Second, it is evident that lower income earners without children bear the main brunt of the inequalities revealed in Table 2b. Cathy, when earning \$600 per week, receives implicit weekly tax credits of \$125 (\$6502 annual), \$50 less than the tax credits she would receive if she was earning \$1400 per week. Indeed that analysis here suggests that lower income earners, by receiving the least benefits from public funds, effectively pay a large proportion of the transfers that make up "the welfare state" as we understand it.

Third, Tables 4a and 4b show big shortfalls in underlying benefits received by persons (usually women) being supported by their partners, compared to the benefits received by such persons

when they are earning. This is the problem that proposals for income-splitting tax credits have sought to correct. There is no principle that says that citizens with zero private income are not entitled to an equal share of public income.

Policy reform, informed by the accounting reform outlined above, suggests that the IRD should be aiming to apply, to all tax-resident adults, the following scale as a modification of the 2010 tax reforms:²⁷

$$6. \quad \text{Disposable Income} = 65\% \text{ of Gross Earnings} + \text{ETC of } \$175\text{pw}$$

Affordability considerations already noted prevent the payment of a universal ETC of \$175 per week (\$9,100 annual) in 2010. However an affordable ETQ of \$155 per week (\$8,060 annual) would still provide effective tax cuts for all in 2010, and could be raised by \$5 per week each year, reaching \$175 in October 2014.

A lack of planning time means that it will be difficult to pursue this pathway. Nevertheless, equation 6 distills the essence of the 2010-11 tax scale. It should be possible to achieve a simple universal tax scale of this form, and with the numbers suggested, on or before 2014.

Benefit Reform

In October 2010, unemployment benefits for "married" people, single persons under 25, and student allowances, are set to rise to \$165.03 per week. For most such persons, to exchange a conditional benefit of \$165 per week for an unconditional ETC of \$155 (rising to \$175 per week in 2014) will be a good trade-off.

Working to a target year of 2014, WINZ would only need to be responsible for the following vertical equity benefits: Accommodation Supplements, Working for Families, Marginal Benefits²⁸ and, assessed on a case-by case basis, Special Benefits. The student loan scheme could be scrapped, with substantial efficiency benefits,²⁹ as the universal payment of Equitable Tax Credits, would render it redundant. Margins on Domestic Purposes Benefits could be removed or reduced if current "in-work tax credits" (part of Working for Families) were made payable to all caregivers in low-income households, and if Child Support³⁰ payments were passed on to the appropriate caregivers.

²⁷ A key feature of this equation is that it incorporates the ACC levy into general taxation.

²⁸ Margins on certain benefits – especially Invalids and Domestic Purposes – above the married unemployment benefit rate.

²⁹ Huge administrative savings, plus reduced incentives for graduates to pursue their careers in other countries.

³⁰ Child Support assessment, which takes account of payers' family circumstances, is not an appropriate function of the IRD.

New Zealand Superannuation would be best handled by the IRD, which would simply pay an additional \$90 per week (October 2010 margin) tax credit, on an individual basis, to persons aged over 65.³¹

WINZ would essentially be conceived as an agency that paid top-up transfer benefits on the basis of vertical equity considerations. The purpose of the reform process is to remove all ad hoc and vertical equity features from the way we account for (and ultimately achieve) taxation and the payment of tax credits. Thus WINZ becomes the agency that applies vertical equity principles to assist those with specific needs. It makes sense that, where WINZ clients have more than one special need, the total assistance paid is greater, but the rate at which such assistance is abated should always be the same. In this way it should be possible to keep effective marginal tax rates (EMTRs) – the effective rate of tax on extra earnings faced by WINZ beneficiaries – below 60%.³²

Conclusion

By using a reformed accounting process that emphasises the principle of horizontal equity, it is possible to analyse the 2010 tax reforms, and to determine the kernel of New Zealand's system of personal taxation. Individual differences from the core flows of public revenues and credits show up as unintended inequalities. Those most discriminated against in New Zealand – indeed increasingly discriminated against – are low income recipients without children, and caregivers of children with middle-high income partners. Those most favoured after the reforms are high income individuals who will receive the same Equitable Tax Credit benefits as middle-income taxpayers, and additional credits through paying lower Accident Compensation levies per dollar of earnings.

Reforms to the actual incidences of taxation, and to the benefit system that exists to provide income support through the application of vertical equity principles, can achieve more efficiency as well as more equity, once we clearly appreciate the differences between nominal and underlying taxation.

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³¹ Margins on NZ Superannuation for persons living alone would be payable by WINZ as a Marginal Benefit"; conceptually comparable with margins (already noted) payable to Invalids Beneficiaries.

³² Child Support remains a difficulty here. To keep EMTRs below 60% for everybody would require that Child Support payments do not automatically increase with liable parents' earnings. Emphasis could be placed on negotiated payments rather than income-based formula assessment. We might also note that, for liable parents earning over \$120,000, Child Support acts as a regressive tax, much as ACC levies are also regressive.