Tax Reform Scenarios:

Cover Note for Scenario A3 sheets provided as background for Session 5

of the

Victoria University of Wellington Tax Working Group

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Introduction

Reform of New Zealand's tax system could involve changes to a number of existing income tax rates/thresholds, broadening the taxation of existing income and/or introducing new taxes. Different combinations of such changes will lead to different outcomes in terms of ability to: raise and sustain revenues; reduce deadweight costs of taxation and support better economic growth; meet distributional objectives; and allow efficient and practical administration. The more coherent the tax system, the more likely that the system delivers on its intended objectives.

Attached to this note are a number of tax reform scenarios that the Tax Working Group has asked officials to work on. These scenarios involve either alignment of the top personal, trust and company tax rates, or some form of non-alignment between the top personal/company tax rates. These income tax changes are in some cases presented with an increase to the GST rate. The aligned scenarios simultaneously present options for base broadening to allow consideration of different combinations of tax reforms. The scenarios are:

	Income tax and GST scenarios	Base broadening options*
1A	**Align-30** • Align top personal and trust rates with company rate at 30%	• Extension of capital income taxation (excludes owner-occupied housing) • Risk-Free Return Method (RFRM) - taxation of investment property • Land tax (0.5% and 1% examples shown) • Deny deductions on buildings • Remove depreciation loading • Adjust thin capitalisation threshold (60% example shown)
1B	**Align-30 with 15% GST** • Align top personal and trust rates with company rate at 30% • Raise GST to 15% • Reduce bottom rates of personal income tax by 2% • Adjust NZS/benefits/WFF to compensate for GST increase	
1C	**Align-30 and semi-universalise WFF** • Align top personal and trust rates with company rate at 30% • Semi-universalise WFF such that WFF provides a minimum amount of $2000 per child per year (maximum amounts remain as currently)	
2A	**Align-27** • Align top personal, trust and company rates at 27%	
2B	**Align-27 with 15% GST** • Align top personal, trust and company rates at 27% • Raise GST to 15% • Reduce bottom rates of personal income tax by 2% • Adjust NZS/benefits/WFF to compensate for GST increase	
3A	**Align-25** • Align top personal, trust and company rates at 25%	
3B	**Align-25 with 15% GST** • Align top personal, trust and company rates at 25% • Raise GST to 15% • Reduce bottom rates of personal income tax by 2% • Adjust NZS/benefits/WFF to compensate for GST increase	
4	**30 – 25 Imputation** • Reduce top personal and trust rates to 30% • Reduce company rate to 25% • Retain imputation system but tax LAQCs and QCs at 30% as an additional integrity measure	• Base-broadening (and GST) options are not shown for scenarios 4 and 5, as they have the same

5	**Classical 30 – 20** • Reduce top personal and trust rates to 30% • Reduce company rate to 20% - remove imputation (classical system) • Scenario 5 assumes the introduction of a capital gains tax to remove the incentive to convert corporate profits into untaxed proceeds from the sale of shares. However, the costing assumes no revenue from the capital gains tax.	distributional impact as those shown in scenarios 1A – 1C.

* Distributional analysis is only shown for capital income, RFRM and land tax due to data limitations. Other base-broadening options are listed in the Annex to this note.

In examining the various combinations of changes to income tax and/or GST tax rates and base broadening measures, it is important to bear in the mind that the fiscal cost and equity impacts of income tax and GST changes can be estimated with greater reliability than the various base broadening options. This reflects both the fact that the taxes on these bases do not currently exist (or are partial) and limited availability of suitable data. For this reason the scenarios presented do not formally 'add up' the impacts of the income tax/GST changes with the base broadening options. Simple summation of, for example, impacts on disposable incomes associated with changes in different tax types could be misleading.

How to navigate the A3 sheets for scenarios 1-3

The top half of these A3 sheets show the effect of the income tax changes (combined with GST changes in 1B, 2B and 3B) – focussing on the fiscal cost, distributional analysis and effective marginal tax rates. The bottom half of the sheets show revenues and distributional analysis for the base broadening options. For these aligned options, distributional analysis is provided for individuals/households. Cost/revenues and distributional analyses of fully combined packages are not shown, but the scenarios should enable the TWG to consider the effects of various combined packages. Effects on fiscal integrity and administration and compliance are also not shown here, but are important considerations of any reform. Previous TWG papers provide more details on these issues.

Fiscal cost

Fiscal cost figures are for the 2009/10 tax year and are indicative only. They are 'static' costings and do not take account of behavioural changes. In later years, the cost of income tax reductions could increase in some scenarios due to a reduction in fiscal drag (a phenomenon in which tax revenues grow faster than income growth depending on the progressive nature of the tax system – an effect which reduces as the tax structure is flattened).

The figures shown exclude 'clawback' (i.e. the revenue increase through taxes like GST resulting from higher-spending as a result of higher disposable income arising from income tax cuts). They are presented in this way because the clawback would only apply to net changes in disposable income when combined with other base broadening options. (Clawback is currently estimated at 15.5%, and would vary with changes to the GST rate and to a lesser extent with the company tax rate).

The fiscal costs of income tax and GST changes are separated into personal, trust, company and GST components. The personal tax figure includes changes to expenditure on New Zealand

Superannuation (NZS), benefits, and Working for Families (WFF), where applicable for GST compensation. The exception is scenario 1C where the additional cost of WFF is shown separately for the semi-universal option.

Equity

Equity analyses for personal income taxes/GST show three charts. The first (top left) is a calculation of the change in disposable income as a result of the income tax change for three family types (details indicated on chart). In this calculation, disposable income is given by taxable income less income tax less ACC earner levy plus WFF tax credits and the Independent Earner Tax Credit (IETC). For scenarios that include a GST increase, the chart gives the real change in disposable income after taking account of expected inflation changes (see below).

The bar chart below shows distributional analysis using Treasury's Taxwell micro-simulation model. The model uses Household Economic Survey (HES) data from the 2007/08 income survey, which is inflated and reweighted to apply to the 2009/10 tax year, with the 2009/10 tax and social assistance parameters applied for the status quo case. In contrast to the line chart above, the chart shows the change in disposable income (no adjustment made for household size) for households, across *total* income bands (as opposed to *taxable* income bands). The percentage figures on these charts indicate the % change in disposable income. The mean change in disposable income is adjusted for inflation in scenarios that include an increase to GST. It is apparent that the mean disposable income changes are lower in the bar chart than the line chart above. This results from a combination of effects:

- Households can be a mixture of families with and without children and of varying size
- Total income bands include non-taxable income (e.g. private pensions)

The table on the right contains standard inequality and poverty measures (refer Background paper from TWG session 2 *Design of the Income Tax and Transfer System*). For scenarios with a GST increase, inflation-adjusted (equivalised) disposable income is used for the calculations, so that the GST effect is included in the measures.

It is important to note that the distributional analysis is static. Distributional effects will vary over time as people's incomes grow.

GST increase:

An increase to GST of 15% is assumed to result in an immediate 2.22% (= (1.15/1.125) - 1) inflation effect, for the purpose of adjusting NZS, benefits and WFF to compensate. This effectively assumes that all prices, irrespective of whether they attract GST or not, increase on average by 2.22%. In pracrtice, it might be expected that prices of non-GST goods would increase by less (although still non-zero if the prices of GST-liable inputs into non-GST goods increase). On the other hand, retailers may use the opportunity of a tax increase with wide applicability to increase prices further than the GST rise implies. On balance, we use an average 2.22% inflation across all goods to reflect the likely maximum impact of the GST increase, and this appears to be consistent with the only analysis (of

which we are aware) of the inflationary impact of the previous GST increase from 10% to 12.5% in 1989 - a 2.3% (=1.125/1.1-1) increase to the CPI[1].

At an individual/household level, the actual effect of an increase to GST will be sensitive to actual price increases to non-GST and GST consumables, and the spending patterns of the particular unit. For the purpose of estimating impacts on disposable income, the analysis assumes that all disposable income is spent (since the real consumption value of any income saved falls similarly in value). In the analysis shown, the impact of income tax and GST changes are averaged over $10,000 income bands. Our analysis of expenditure patterns across these bands (using HES 06/07 data) indicates wide variances in the ratio of GST to total expenditure within each income band and little discernable change between income bands.

Compensation for NZS, benefits and WFF has been modelled such that:

- Net benefit: amounts increase by 2.22%;
- NZS: payments increase by 2.22% after any effect of the tax cuts has been taken into account (where applicable); and
- WFF: Family Tax Credit, In-Work Tax Credit, and Minimum Family Tax Credit amounts increase by 2.22% (no change to abatement thresholds).

In each case, implementation of the above would also need to take indexation required by law into account (e.g. indexation of certain WFF parameters when CPI reaches 5% cumulative).

Efficiency & growth

As with the material presented to TWG session 2, effective marginal tax rates (EMTRs) are used as an indicator for efficiency and potential impact on growth. The top chart is a calculation of the EMTRs as a result of the income tax change for two family types (details indicated on chart). In this calculation, EMTRs include income tax, ACC earner levy and abatement of WFF and IETCs.

The table shows the numbers of individuals that face a change in EMTR as a result of the tax changes. These figures have been modelled in Taxwell and include effects from income tax, ACC earner levy and abatement of WFF and IETCs as well as abatement of other social assistance, e.g. benefits. Again the income bands are based on total household income, rather than family taxable income in the line chart above.

Base broadening options

The main base broadening options shown on the A3 charts are extending capital income taxation, RFRM applied to investment property, and land tax. (These are not exhaustive – the fiscal costs of other options are shown in the lower-right panel of each A3; more details in the Annex). Further information on these taxes has been provided in previous TWG papers and is not reiterated here. In comparing the base broadening options, the differing vertical scales on the distributional charts

[1] See R. Stephens (2007), The Economic and Equity Effects of GST in New Zealand. In R. Krever and D. White (eds) *GST in Retrospect and Prospect.* Brookers: Wellington.

should be kept in mind. Although the base broadening options do not differ between scenarios, the magnitude of revenue impacts and effects on mean disposable incomes do vary between the scenarios depending on the personal tax rate structures in each case.

Extension of capital income taxation

This option involves extending income taxation to capital income not currently taxed, with the exception of owner-occupied housing. The bar chart shows the mean change in disposable income for *all* households within each total income band – whether or not they own capital assets liable to tax under the extended regime. By definition therefore there is no effect on households without the relevant capital assets but there may be much larger effects on the (sometimes small numbers of) households in each income band that do own such assets.

It should be noted that the definitions of total and disposable incomes in these charts (and the income tax and GST charts earlier) do not include income from currently untaxed capital gains. This is because the Survey of Family, Income and Employment (SoFIE) and HES datasets typically do not record this as income. Because of this, caution must be taken when interpreting the effects on disposable income as a result of a package of changes. In addition, because the income data in the SoFIE and HES datasets are not fully consistent (and only SoFIE contains asset information across households), the constructed 'income bands' for each dataset are not identical. For this reason, and because the capital income estimates obtained from SoFIE are approximations (using assumed rates of return on recorded asset data), we do not recommend adding the 'change in disposable income' measures obtained from the income tax/GST reform to the equivalent measures obtained for the base broadening reforms.

The distributional impacts shown are static and represent initial impacts – general equilibrium effects such as impacts on property prices and rents are not modelled. It is possible that some, and perhaps most, of the effect of a CGT on rental property would be passed on to tenants through higher rents charged by landlords. While low income earners have a higher propensity to rent (implying some of the burden of a capital gains tax could be borne by them), the extent of any impact on low income earners will likely be determined by the interaction of demand and supply (and associated feedbacks involved) in the markets for rental and owner-occupied housing. Further, welfare settings will likely play a role for lower income earners (e.g. the accommodation supplement would reflect increases in market rents and the inflationary impact would flow through to higher benefit levels). The ultimate impact on disposable income is therefore not straightforward to determine. Further work could be undertaken if required.

RFRM

The RFRM option involves taxing net equity on residential property at a risk-free rate of return, here assumed to be 6%. Distributional analysis is on a similar basis to the capital income taxation extension example above (on the basis that RFRM operates in a similar manner to an accrual-based CGT). Again, the change in disposable income in the analysis of the scenarios does not account for any reduction in disposable income from rent increases resulting from the RFRM option.

Land tax

In the land tax option, it is assumed that the tax is applied to all land excluding conservation and public land. In the distributional analysis for households, it has been assumed that the mean land value in each income band is twice the income at the middle of the band. The factor of 2 is a crude estimate. Comparison of mean residential property values by area unit deciles (QVNZ data) with mean residential property values by income deciles (SoFIE data) showed a similar magnitude and distribution when the deciles were mapped 1 to 1. On assumption that the mapping would have a similar effect on land values (for which we only have data by area unit decile), we obtained an estimate of land values being approximately twice that of income.

How to navigate scenarios 4 and 5

Scenarios 4 and 5 are presented together on a single A3 sheet. They focus on the fiscal cost of the income tax changes and the impact on corporate efficiency. Due to the more substantive changes proposed in these scenarios, particularly scenario 5, a qualitative assessment of compliance and administration and fiscal integrity is included in each scenario. Previous TWG papers provide more details on each of these issues.

Fiscal cost

As with scenarios 1-3, fiscal cost figures are for the 2009/10 tax year and are indicative only. They are 'static' costings and only account for behavioural changes in the case of the classical option presented in scenario 5. This alternative approach is necessary due to the significance of the change in that scenario relative to the status quo. Accordingly, our assumptions around behaviour have material impacts on the fiscal cost of scenario 5. Again, it should be noted that the cost of income tax reductions could increase in some scenarios due to a reduction in fiscal drag in later years.

The classical system presented in scenario 5 assumes that a capital gains tax has been introduced to remove the incentive to convert corporate profits into untaxed proceeds from the sale of shares. This assumption **indirectly** reduces the cost of this scenario as assuming base protection measures, such as capital gains taxes, allow for more conservative assumptions about the amount of income that will be sheltered within companies. However, to ensure consistency with the other scenarios, there is no **direct** revenue gain included in this costing attributable to the capital gains tax.

The remainder of the costings for these two scenarios, including the treatment of clawback and NZS, and the separation of costs into personal, trust, company and GST components, are consistent with the methodology used for scenarios 1-3.

Efficiency & growth

In both scenarios the proposed headline corporate tax rate is compared with the unweighted average tax rate of OECD countries and 'small' OECD countries. The countries included in the calculation of 'small' OECD countries are New Zealand, Australia, Austria, Belgium, Finland, Greece, Ireland, the Netherlands, Norway, Portugal, Spain, Sweden and Switzerland.

The impacts on efficiency and growth as a result of the personal tax reductions have not been shown in scenarios 4 and 5, as they are identical to the efficiency and growth impacts shown in scenario 1.

Equity and base broadening options

Equity considerations and potential base broadening options have also not been included in scenarios 4 and 5. This is because the impacts on equity and of base broadening options are identical to the impacts shown in scenario 1 in all but one case.

The exception is when measuring the change in mean disposable income by household total income band in the classical system shown in scenario 5. In this scenario, the removal of dividend imputation will result in the double taxation of dividend income. Accordingly, total tax paid on dividend income could increase from 38 percent to 44 percent for a taxpayer on the top personal tax rate, or from 12.5 percent to 30 percent for a taxpayer on the bottom personal tax rate.[2] We do not have sufficient data to show the impact of this double taxation on a per household basis, however, because dividend income accounts for around only 1% of total income, it is unlikely that the removal of dividend imputation will have a measurable impact on the equity measures shown in scenario 1.

Summary of scenarios

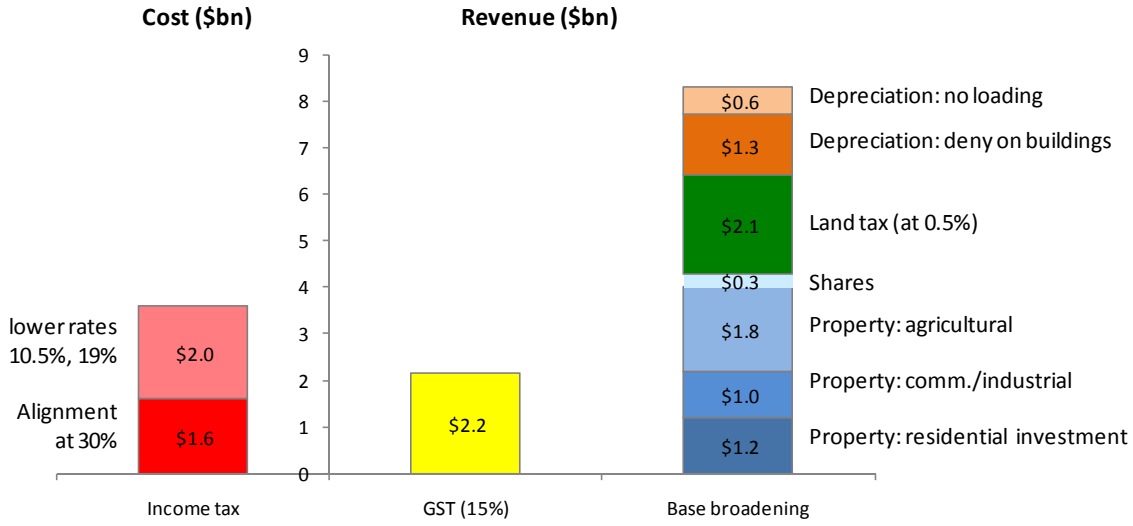
The following table summarises the fiscal costs and equity effects of the personal income tax changes and, where applicable, GST increases and associated compensatory measures.

Scenario	Fiscal cost ($m)	Equity measures*		EMTRs		
		Gini coefficient	80/20 ratio	% with increase	% with <10% fall	% with >10% fall
Status quo	0	0.34	2.84	-	-	-
1A	$1,610	0.34	2.87	-	26%	-
1B	$1,410	0.34	2.83	<1%	99%	-
1C	$2,250	0.35	2.89	-	24%	4%
2A	$3,090	0.35	2.89	-	15%	11%
2B	$2,890	0.34	2.85	<1%	89%	11%
3A	$4,060	0.35	2.91	-	15%	11%
3B	$3,860	0.35	2.87	<1%	89%	11%
4	$2,340	0.34	2.87	-	26%	-
5	$3,210	0.34	2.87	-	26%	-

*Poverty measures are not shown as there is no change in all scenarios, except for scenario 1C which shows a small reduction in child poverty compared to the status quo.

[2] This is calculated by adding the taxation of company income, 20%, to the tax levied on the remaining distributions, ie 0.2 + 0.3 * 0.8 = 0.44.

The revenue potential of base broadening options, alongside the costs of scenarios 1A (alignment at 30%) and 1B (adding GST 15% and compensation including reduction in lower income tax rates) are shown below.



Note: Alternative RFRM on investment property = $0.8 bn.

ANNEX

Base Broadening Option	Description	Affected Taxpayers	Steady state revenue ($m)
CGT (No Exemptions)	A CGT would generally tax the nominal increase in value of assets on sale. The profit on sale would be taxed at taxpayers' marginal tax rates. It could either include or exempt a taxpayer's primary dwelling.	Home owners, rental property owners, investors, businesses	8890
CGT (Excludes Owner Occupied Housing)		Rental property owners, investors, businesses	4540
RFRM (on Rental Property)	Total net rental and capital gain income is deemed to be replaced by a 6% risk free rate of return (applied to the level of net equity in rental property). Rental income would not be separately taxed and no associated deductions would be allowed	Rental property owners	700
Land Tax (No Exemptions, Deductibility Included, Immediate at 1% rate)	A land tax would apply annually to the value of land (excluding improvements) at a specific rate (e.g. 0.25%, 0.5% or 1%). It would generally tax the entire land base without specific land-type exemptions. It would leverage off the Rating Valuation system. There are a number of land tax variants that can assist in managing equity issues (e.g. the disproportionate burden borne by land intensive industries)	Landowners	3240
Land Tax (No Exemptions, Deductibility Included, Immediate at 0.5% rate)		Landowners	1750
Land Tax (No Exemptions, Deductibility Included, Immediate at 0.25% rate)		Landowners	910
Land Tax (No Exemptions, Phased Rate)		Landowners	3240
Land Tax (Per Ha Exemption, Immediate Top Rate)		Landowners	

Land Tax (Per Ha Exemption, Phased Rate)		Landowners	
Land Tax on Incremental Increase in Value		Landowners	3240
Loss Ring-Fencing (Released Upon Sale)	Loss ring-fencing would restict the ability to offset rental property losses against other forms of taxable income. Rental losses could be allowed on sale or permanently disallowed	Rental property owners	165
Loss Ring-Fencing (Permanently Disallowed)		Rental property owners	195
60% Thin Capitalisation Threshold	Reducing the acceptable level of debt capitalisation for foreign-owned NZ companies for tax purposes (reducing the total debt/total assets percentage down from 75%). This will reduce the level of interest deductions taken in NZ	NZ companies owned by non-residents	177
67% Thin Capitalisation Threshold		NZ companies owned by non-residents	92
Reducing Depreciation Loading	Reducing the accelerated depreciation concession for new assets from 20% to 15% . This means an asset that can currently be depreciated 48% (40% x 1.2) would only be able to be depreciated at 46% (40% x 1.15)	Rental property owners, investors, businesses	140
Removing Depreciation Loading	Removing accelerated depreciation (meaning assets will only be depreciated at their core economic depreciation rates)	Rental property owners, investors, businesses	600
Removing Depreciation on all Buildings	Eliminating the ability to claim depreciation on all buildings on the basis that the empirical evidence shows they are not in fact depreciating	Rental property owners, investors, businesses	
Excise taxes	Raise excise taxes on both alcohol and tobacco by 10%	Smokers & drinkers	140
Bloodstock Writedown	Remove the bloodstock writedown concession provided	Race horse owners	1.5

Concession	in 2006		
Totalisator Duty	Remove the totalisator change made in 2006 (where the rate of duty paid by the NZRB was aligned with the rate of duty paid by casinos)	NZ Racing Board	33.6
ESCT Exemption	Remove the ESCT exemption for employer contributions to complying super schemes (including Kiwisaver schemes). The current exemption means employers need not deduct ESCT at the higher 38% for contributions made in respect of high income earners	Employees and employers	180