

Treasury Report: Illustrative options for personal tax reductions

Date:	20 March 2008	Report No:	T2008/456
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Action Sought

	Action Sought	Deadline
Minister of Finance (Hon Dr Michael Cullen)	Discuss the contents of this report.	You are scheduled to discuss this with Treasury at 2.45pm on Tuesday 25 th March
Associate Minister of Finance (Hon Trevor Mallard)	None	None

Contact for Telephone Discussion (if required)

Name	Position	Telephone	1st Contact
Bill Moran	Manager	9176 947 (wk)	[information deleted in order to protect the privacy of natural persons, including deceased people] ✓
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[information deleted in order to protect the privacy of natural persons, including deceased people]			

Minister of Finance's Office Actions (if required)

None.

Enclosure: Yes

Treasury Report: Illustrative options for personal tax reductions

Executive Summary

This report is intended to feed into your ongoing consideration of the design of the tax package for Budget 2008. The package will be the largest single initiative in the term of the Labour-led government so far. Consequently, we would suggest situating the package within a long-term strategy and within the Government's overarching objectives. Our advice endeavours to work within those objectives.

Relevant Government objectives

The Government has a range of objectives. In particular, you have outlined four tests for tax cuts for Budget 2008, with the most relevant for tax design being the inequality test, and to a lesser extent the inflation test. The Government also has economic objectives, as articulated in the Economic Transformation agenda, for example. In your speeches, you have emphasised an economic approach that involves both growth and fairness.

The design of the package will potentially involve trade-offs between these objectives, with choices depending on your weighting and judgements of the different aspects.

Tax and inequality

You have indicated a strong focus on inequality. We would suggest four general considerations in designing a tax package from an inequality point of view:

- The personal tax system has limitations in that it can only moderately influence a subset of issues of inequality, namely income inequality. Other policy levers can have greater impact on income inequality, and, more broadly, can influence consumption inequality and inequality of opportunity.
- Low taxable income can often be a poor proxy for those on persistently low household incomes. Previous analysis provided to you suggests that the significant majority of taxpayers with incomes under \$18,000¹ are beneficiaries, superannuitants, students or members of a higher-income household and so could arguably be given less focus, even with an inequality objective.
- Tax reductions to taxpayers on very low incomes could potentially be achieved at lower fiscal cost by targeting, such as by extending the In-Work Payment to those without children (as is the case in the US and the UK). However, it introduces higher effective marginal tax rates at higher incomes, but at the same time the fiscal saving from targeting could be used to lower marginal rates for a wider group.
- The overall impact on income inequality from different tax package options depends on how income inequality is defined. In particular, we would suggest that a focus on households rather than a focus on individuals gives a better sense of impacts on most taxpayers' wellbeing.

¹ 30 hours/week at \$12 an hour minimum wage is equivalent to \$18,720 per annum.

Tax and growth

You also have general economic objectives, including a focus on innovation, higher wages, higher skills, investment and saving. Drawing on a deep economic literature on taxes and growth, we would make three broad observations:

- The weight of evidence suggests that income taxes affect behaviour in ways that reduce participation, investment in skills, productivity, and growth. There is debate about the magnitudes of these effects but not their direction. The literature suggests reducing high effective marginal tax rates across the income spectrum has the greatest benefits for growth.
- The potential growth benefits could be significant over the medium term. Given the challenges inherent in obtaining definitive results we would caution against placing too much weight on any one result or any one number. Nevertheless surveys of the effect of taxes on growth typically suggest that a tax reduction of 1% of GDP increases GDP per capita by up several percentage points over time.
- International competitiveness is also a consideration, given the increasing mobility of labour.

A multi-year approach

There is usually limited scope in one Budget to make substantial tax changes. However, an ongoing approach can deliver substantive changes over time. We consider the main benefits of a longer term approach include the ability to set out a desired end point, and the ability to position any particular changes (which may on their own be quite modest) within the context of a transition to that end point.

But as a trade-off, such an approach is likely to require considerably more pressure on managing the growth in government expenditure. In particular, for the illustrative options presented in this report, we have assumed that a significant portion of the existing operating allocation in future Budgets from 2011 is allocated to tax reductions.

Illustrative Scenarios

In the attached A3 sheets, we present four illustrative scenarios for long-term tax reductions (and one short-term scenario). The long-term scenarios differ primarily in their approach at low incomes: (B) a free zone, (C) a free zone, (D) a 10% rate, or (E) a 15% rate. Scenarios B and C differ in the size of the free zone relative to changes at higher incomes. Scenarios C, D and E all deliver the same tax savings (about \$690 per annum) to a taxpayer earning \$21,000 or more. The implication, however, is that the lower fiscal cost of the 10% and 15% options allows additional changes at middle to high incomes. The impact on the objectives described above can be summarised on the following table (relative to the status quo):

		Closer to Scenario B	Closer to Scenario E
Inequality	Target group	More focus on taxpayers on very low incomes.	More focus on taxpayers on low to middle incomes.
	Individual measures	Reasonably similar \$/wk tax reduction across the income spectrum. Proportionally much more tax reduction to those on lower incomes.	Significantly more \$/wk tax reduction to those on middle to high incomes. Proportionally more tax reduction to those on lower incomes.
	Household measures	No significant impact on household income inequality.	No significant impact on household income inequality.
Growth	Labour supply (participation and hours worked)	Better incentives generally. Better incentives relative to Scenario E for secondary earners (going from not working to part-time).	Better incentives generally. Better incentives relative to Scenario B for most other groups.
	Productivity (investment in skills, entrepreneurial effort, etc.)	Marginally better incentives.	Significantly better incentives, particularly at low to middle incomes.

From an inequality point of view, we consider that the most meaningful measures of income inequality (i.e. households) show no significant difference between the options, and other policy levers can have a much greater potential impact on inequality more broadly.

From an economic point of view, we consider that there are likely growth benefits associated with reducing effective marginal tax rates that are small, but significant over the medium term. The features in the various options that are most likely to deliver these benefits are:

- lowering EMTRs for those on lower incomes (around \$15,000-\$30,000), and thereby increasing incentives in particular for participation and investment in skills;
- lowering EMTRs for those on middle incomes (around \$30,000-\$60,000), countering some of the impact of EMTRs from Working for Families, and thereby increasing incentives in particular for investment in skills, changing to better jobs, or entrepreneurial effort; and
- lowering EMTRs for those on higher incomes (above \$60,000), thereby increasing incentives in particular for entrepreneurial effort and to assist international competitiveness in skilled labour mobility.

The illustrative scenario that has the greatest combination of these features and meets or limiting assumptions is Scenario E.

In particular, we think a free zone would represent a substantive change to the structure of the tax system that would be difficult to alter later. Given the opportunity costs (in terms of fiscal cost and the ability to reduce effective marginal tax rates across the income spectrum), we would suggest exploring targeted measures further if boosts for very low incomes are desired.

Recommended Action

We recommend that you **discuss** the contents of this report at your meeting with Treasury scheduled for 2.45pm Tuesday 25th March.

Bill Moran
for Secretary to the Treasury

Hon Dr Michael Cullen
Minister of Finance

Treasury Report: Illustrative options for personal tax reductions

Purpose of Report

1. This report is intended to feed into your ongoing consideration of the design of the tax package for Budget 2008. The report uses three illustrative options to demonstrate the main strategic choices inherent in different options and the trade-offs involved.
2. The tax package will be the largest single initiative in the term of the Labour-led government so far. Consequently, we would suggest situating the package within a long-term strategy and within the Government's overarching objectives.
3. As the decisions at hand focus on personal tax reductions, we've done the same and focussed only on personal tax. We deliberately don't consider the merits of changing the GST rate, changes to corporate tax, or amendments to working for families tax credits, as opposed to the personal tax system.

Context – Government objectives

4. The Government has a range of objectives. We consider the most relevant objectives below, namely the four tests for tax cuts you have outlined, and the growth objectives that underlie the Economic Transformation agenda. The design of a tax package will potentially involve trade-offs between these objectives, depending on the weighting given to different aspects.

The Four Tests for Tax Cuts

5. You have outlined four tests for tax cuts for Budget 2008:
 - We will cut taxes without increasing borrowing.
 - We will cut taxes without cutting public services.
 - We will cut taxes in a way that does not exacerbate inflationary pressures.
 - We will cut taxes in a way that does not lead to greater inequalities in our society.
6. **The first two tests** are fiscal tests, and so impose limits on the size and timing of tranches of tax cuts, but not the composition of the package.
7. **The third test** is largely a macro-economic test, but also has some implications for the design of the tax package. In principal a tax cut package can potentially help ease medium-term inflationary pressures by improving the supply potential of the economy. We would support that view, but caution that any tax-cut induced improvement in the supply side will emerge slowly over time, so would have very limited immediate impact. Demand impacts will tend to dominate over the short term.
8. More recently, Treasury has noted the trade-offs between short term demand impacts of changes in fiscal policy and longer term objectives. In his speech in December 2007, John Whitehead noted that "in some circumstances, it might be worth risking interest rates or the exchange rate being higher for longer if the medium term benefits to economic performance outweigh the costs." Moreover, to the extent that a tax package can induce increased supply, inflationary pressure will be lower for a given level of demand.
9. So while we would note that the design of a tax cuts package can influence what portions of the tax cuts are converted into private consumption (more likely to be inflationary) and savings (non-inflationary), we would not recommend a strong focus on this aspect from a macro-economic point of view.

10. In addition beyond the immediate inflation issue, boosting national savings has been a long-running government priority. Several substantial policies have been previously initiated. A tax package can be designed to contribute to those government savings goals by limiting the reduction in national savings implied by any tax cut package (on the assumption that the counterfactual is government saving rather than expenditure).
11. **The fourth test** has implications for tax cut design. As this test has the strongest potential implications for design of the package, we explore in some detail potential interpretations of this test below.

Economic Transformation Agenda

12. The Government has a long-term economic goal of moving New Zealand to the top half of the OECD. This economic objective is captured in a practical sense by the five themes of the Economic Transformation Agenda.
13. Personal tax policy can contribute most directly to three themes: growing globally competitive firms; innovative and productive workplaces, underpinned by high standards in education, skills and research; and an internationally competitive city – Auckland.
14. In particular, tax could be one instrument that could contribute to these themes by encouraging labour market participation, education and skills development, entrepreneurship, and helping attract and retain global talent.
15. In your speech to the Chamber of Commerce earlier this year, you emphasised a focus on growth and fairness, and within that focussed strongly on skills, productivity, wages, innovation, and saving. Again, tax could be one instrument that could contribute to these objectives by improving incentives. We explore options that best contribute to these goals below.

Tax and inequality

Tax as a policy lever to address inequality

Inequality of opportunity and outcome

16. A distinction is often drawn between *inequality of opportunity*, which captures the principle that “all individuals should have the opportunity to succeed on the basis of their own effort, skill, and ingenuity,”² and *inequality of outcome*, which reflects differences in some measure of well-being, such as income.
17. Inequality of opportunity is a more dynamic concept, capturing the idea of life chances over time, and the transmission of those life chances between generations. Inequality of outcome is a more static concept, capturing cross-sectional differences on some measure. The two concepts are not independent – there is some empirical evidence of a negative relationship between income inequality and intergenerational earnings mobility.³
18. The tax system can play a role in inequality of outcome, but can only have a more limited impact on inequality of opportunity (arguably more important to long-run

² Ben Bernanke (2007), “The Level and Distribution of Economic Well-Being,” speech to Greater Omaha Chamber of Commerce, 6 February 2007.

³ Anna Cristina d’Addio (2007), “Intergenerational Transmission of Disadvantage: Mobility or Immobility across Generations? A Review of the Evidence for OECD Countries”, OECD.

outcomes). The evidence suggests education is the strongest policy lever for influencing inequality of opportunity.

19. A relevant tax consideration in this context is that high effective marginal tax rates faced by some groups can reduce the benefits of getting a job and investing in skills, relative to other groups. Reducing these disincentives (affecting inequality of opportunity) could have an impact on future inequality of outcome.

Inequality of outcome – income and consumption

20. Inequality of outcome can be measured in terms of pre-tax income, disposable income (i.e. net of all income including government transfers), wealth, consumption, health status, and so on.
21. Consumption is arguably a better proxy for economic wellbeing than income, yet it is much less analysed. The available evidence generally shows that inequality of consumption is much lower than inequality of income.⁴ Since the tax system can only influence consumption in relation to changes in income, it can play a more limited role in the economic outcomes that are arguably more important. That said, there may be other considerations that could suggest focussing on income, such as perceptions of relative status in society.⁵

Policy levers to address inequality of income and consumption

22. The tax and transfer system as a whole can make a significant difference to disposable income inequality relative to pre-tax income inequality.⁶ Government spending can also have a significant impact. One cross-country study⁷ found that “after augmenting income to include the value of non-cash benefits for health care and education net of both direct and indirect taxes, the income of the poor turns out to be much closer to the median and the distance between the rich and the poor falls in all countries”.
23. This issue was analysed in the New Zealand context by the 2001 Tax Review.⁸ The Review found that government spending had a much greater distributional impact than the difference between a progressive and proportional tax system. Similarly, a 2004 Treasury working paper⁹ investigated New Zealand’s system and found that “final incomes are more equally distributed than disposable incomes”.
24. In short, the Government has a number of policy levers to influence inequality of income and consumption. The personal tax system is one of these levers, but it is comparatively weaker than benefits and superannuation, accommodation support, and health and education spending.

⁴ e.g. Dirk Krueger Krueger and Fabrizio Perri (2005), “Does Income Inequality lead to Consumption Inequality? Evidence and Theory” NBER Working Paper 9202; Meyer (2007), “Further Results on Measuring the Well-Being of the Poor using Income and Consumption,” NBER Working Paper 13413.

⁵ e.g. Richard Layard (2005), “Happiness: Lessons from a New Science”.

⁶ A. Brandolini and T. M. Smeeding (2007), “Inequality Patterns in Western-Type Democracies: Cross-Country Differences and Time Changes”, Centre for Household, Income, Labour and Demographic Economics. (Note that disposable income is used to mean “the sum of all cash incomes earned by the household (wages, salaries, earnings from self-employment, cash receipts from property, unemployment compensation, welfare benefits, public and private pensions, child and family allowances, alimony), net of income taxes and social security contributions.”)

⁷ A. Brandolini and T. M. Smeeding (2007).

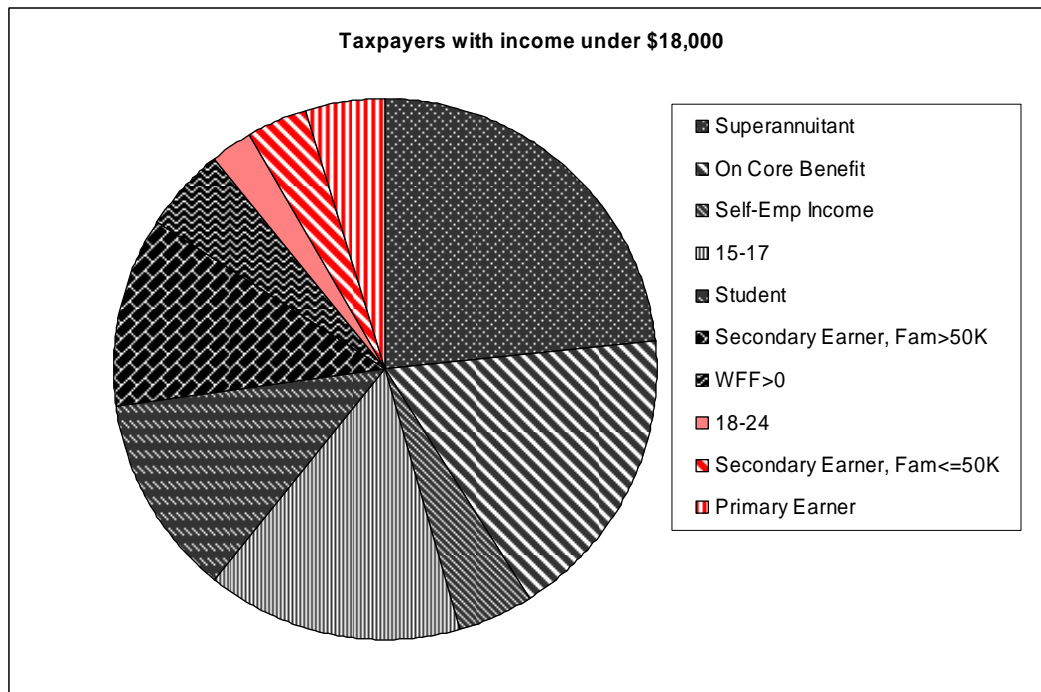
⁸ Robert McLeod et al (2001), “Tax Review 2001”.

⁹ Ron Crawford and Grant Johnston (2004), “Household incomes in New Zealand: The impact of the market, taxes and government spending, 1987/88-1997/98,” Treasury Working Paper 04/20.

Income as a proxy for wellbeing

25. One of the difficulties in considering the distributional impacts of tax changes is that often low taxable income is a poor proxy for those on persistently low household incomes. In analysis provided to your office earlier, we found that the 1.4 million taxpayers with incomes under \$18,000 are predominantly not primary earners, as shown in the chart below. 92% can be characterised as those with temporary low income (15-24 year olds and students), those with other income (self-employed), those who get support through the benefit system (superannuitants and beneficiaries), and those who are in higher income families (secondary earners).

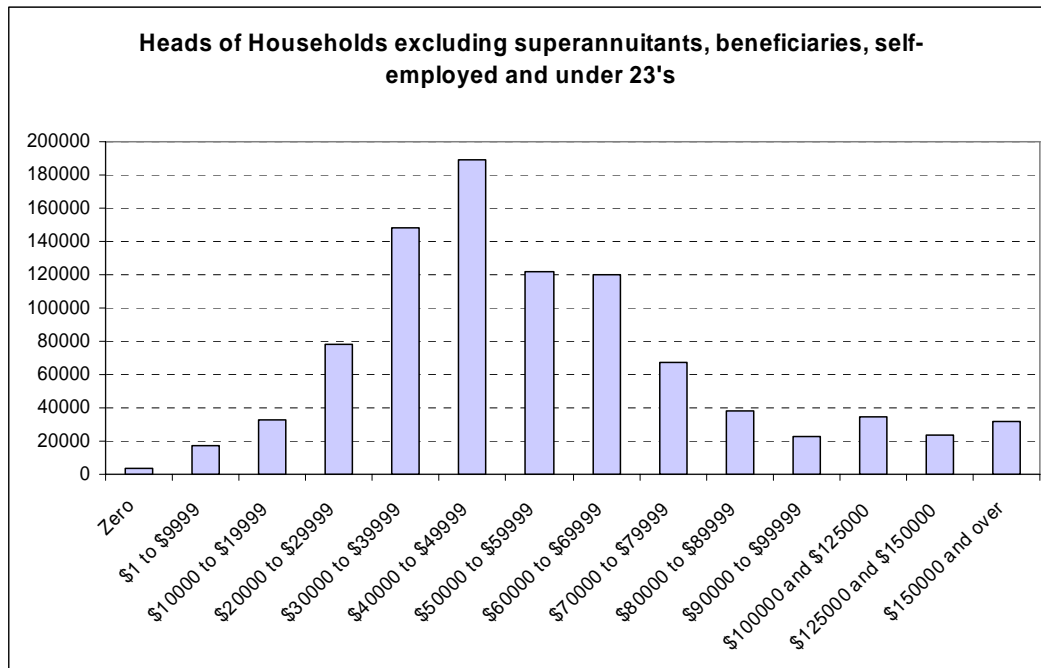
Figure 1: Composition of taxpayers on incomes below \$18,000 per annum



Source: Treasury, Household Economic Survey 2003/04

26. On the other hand, there remain 113,000 taxpayers with incomes under \$18,000 who on the face of it appear to have persistently low incomes. This figure does, however, represent an upper bound, since we know that some of these taxpayers are unlikely to have low economic well-being – for example, taxpayers who have only been employed for a few months of the year, taxpayers who have LAQC deductions, and so on.
27. We have extended this analysis by looking at taxpayers who are heads of households (excluding superannuitants, beneficiaries, self-employed, and under-23s). As shown on the chart below, about 60,000 of these taxpayers have incomes below \$20,000. Within this number:
- Almost all of the around 20,000 of those with incomes below \$10,000 work for less than half a year (and for some for a small proportion of a year).
 - Around 18,000 of those with incomes between \$10,000 and \$20,000 also receive Working for Families payments, benefit payments, or self-employed income in addition to their taxable income.
 - A reasonable proportion are working full time for a great part of the year and on incomes of \$15,000-\$20,000.

Figure 2:



Source: Treasury, Household Economic Survey 2003/04

28. Based on the above analysis, we think taxpayers with incomes under \$18,000 could be given less focus in a tax package, even with an objective of reducing inequality. For context, someone working 30 hours per week at the minimum wage would receive taxable income of \$18,720.

Targeting versus universal changes

29. Universal tax changes that provide meaningful reductions to those on very low incomes come at significant fiscal cost – that fiscal cost represents an opportunity cost that could be used for other government objectives.
30. Delivering reductions to those on very low incomes at lower fiscal cost could potentially be achieved by targeting, but we acknowledge that this may be less socially acceptable than universal changes and also introduces higher effective marginal tax rates at higher incomes.
31. For example, the In-Work Payment could be extended to those without children (at a lower rate), as is the case in the United States and the United Kingdom. On the other hand, working tax credits can be complex to design and administer, as has particularly been the case in the United Kingdom. Alternatively, the existing transitional tax allowance (available to those who work at least 20 hours per week) could be extended to make it available to those in full-time work at low incomes.

The impact on income inequality

Ways to consider income inequality

32. The overall impact on income inequality from different tax package options depends on how it is defined. Some of the main judgements include:
- *whether to focus on absolute or proportional reductions.* For example, ensuring that all taxpayers receive the same dollar value reduction in their taxes could be achieved by establishing a free zone, whereas ensuring that all taxpayers receive the same percentage reduction in tax paid could be achieved by reducing all tax rates, with lower tax rates reducing by less than higher rates.

- *whether to focus on all taxpayers or only those who cannot be reached directly by targeting.* Policies such as Working for Families, benefits, and superannuation can boost the incomes of particular groups, so a package could be focused on the remaining taxpayers, rather than all taxpayers.
 - *whether to focus on tax in isolation or in relation to other government policies.* Given significant government initiatives in recent years that influence inequality (e.g. increases to the minimum wage, income related rents, primary health care strategy), a tax package could be situated as part of a portfolio of initiatives and inequality assessed across the portfolio, rather than on its own.
 - *whether to focus on the individual or the household.* Tax lends itself most immediately to comparisons at the individual level, yet analysis at the household level is arguably more economically relevant.
33. We present some of these different measures in our analysis below. In particular, we would suggest that it makes the most sense to focus on households to get a better sense of impacts on most taxpayers' wellbeing rather than a focus on individuals.

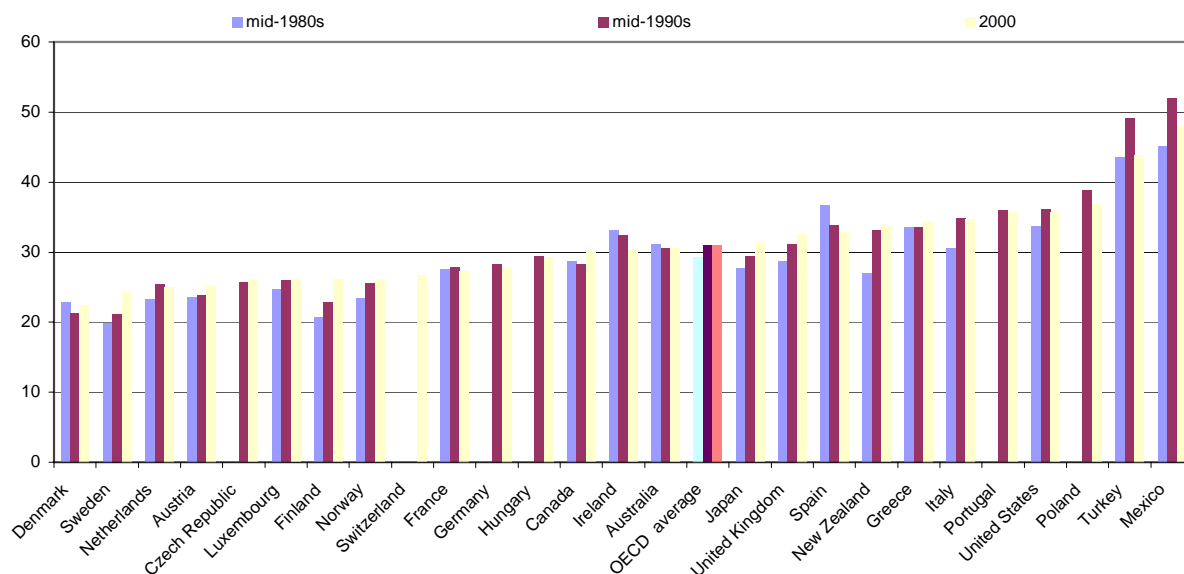
Common measures of household income inequality

34. A common unit of analysis for inequality is equivalised household disposable income. Income consists of earnings from work, property income such as interest and dividends, and pensions and other social security benefits; income taxes and social security contributions paid by households are deducted. Household income is adjusted to take account of household size.
35. Two measures are then commonly used to measure the inequality in equivalised household disposable income:
- *Gini coefficient*, a measure that ranges from 0 in the case of "perfect equality" (each share of the population gets the same share of income) to 100 in the case of "perfect inequality" (all income goes to one person); and
 - *income ratio*, calculated as the ratio of the 80th percentile to the 20th percentile.
36. Note that both these measures consider a static view of income distribution. That is, they don't provide insights into how the incomes of individuals change over time.
37. Gini coefficients vary quite substantially across countries and within countries across time, as shown on the chart below. Like many countries, New Zealand experienced a significant increase in income inequality between the mid 1980s and mid 1990s, from 27.0 to 33.1, with little change thereafter. The 2007 *Social Report* found that New Zealand's Gini coefficient was 33.5 in 2004.

Figure 3:

Distribution of household disposable income among individuals

Measured by Gini coefficients



Source: OECD

38. The 2007 *Social Report* noted that “In 2004, the equivalised disposable income of a household at the 80th percentile was 2.8 times larger than the income of a household at the 20th percentile, a slight increase from 2.7 times larger in 2001. In 1988, the ratio was 2.4. Income inequality rose between 1988 and 1991, then plateaued, rising again from 1994.”
39. The illustrative scenarios considered later in this report will show that the difference in Gini coefficients and 80/20 ratios between the options is very low. In the context of variation across countries and variations in New Zealand’s history, we consider that these differences are not significant.

Taxes and Growth

There is consensus in the literature that income taxes affect behaviour in ways that are bad for participation, skills, productivity and growth. There is debate about the magnitudes of these effects but not their direction.

40. The task of tax policy is to minimise the efficiency (or growth) costs of the tax system while also meeting government redistributive aims.
41. Many studies have attempted to determine the impact of taxes on growth. These studies typically either analyse macro aggregates directly, or analyse behaviours potentially affected by taxes, such as labour supply and productivity decisions, and savings and investment decisions.

Macro analysis

42. The consensus of studies focussing on the macro analysis is that taxes negatively affect growth. An interesting feature of these studies is that over time as the analysis has become more sophisticated this conclusion has generally strengthened.
43. The OECD, for example, has recently carried out unpublished work taking a strong interest in the links between taxes and economic growth. This comprises both a literature review of the links between tax levels, structures and reforms and economic

growth, and empirical analysis of data from OECD countries with a special focus on productivity. Focusing on personal income taxation, there is evidence that flattening the tax schedule could be beneficial for GDP per capita, notably by favouring entrepreneurship.

44. The potential growth benefits could be significant over the medium term. Given the challenges inherent in obtaining definitive results we would caution against placing too much weight on any one result or any one number. Nevertheless surveys of the effect of taxes on growth typically suggest that a tax reduction of 1% of GDP increases GDP per capita by up several percentage points over time.

Micro analysis

45. Many studies have also considered labour supply responses. These range from studies of participation and hours worked through to studies of longer-run productivity-related human capital responses such as education, in-work training and income per hour worked. We see productivity as response most important to the government's Economic Transformation agenda. Unfortunately it's something of a truism that the more economically important a potential response to a tax is, the harder it is to reliably measure.
46. Two recent literature summaries of mostly US and European data by three respected tax economists¹⁰ conclude that participation and hours effects are more studied, but productivity effects are more important, and also much harder to study. Though current best evidence suggests that overall labour supply responses to tax cuts are small, especially for employees, they can be quite large for specific groups such as poorer families, lone parents and secondary earners. Interactions between the tax and welfare payments system also appear to have large effects for those and other groups facing high marginal tax rates.
47. In addition, observed responses of taxable income (total income declared for tax) have also been estimated to be quite high; that is, when tax rates rise, taxpayers, especially those on high incomes or self-employed, both earn less income and hide more of it from tax authorities. Each of these effects can be expected to impact on current incentives to work and declare income, and, even if small, to cumulate into more substantial longer-term effects. These longer-term aspects are, by their nature, difficult to measure but are increasingly recognised as important through their impact on long-run productivity through affecting the rewards from, for example, decisions to invest in education, training and the in-work growing of skills, and the rewards to entrepreneurial effort and risk-taking.

Summary

48. Therefore the continuing consensus of the tax policy literature is that taxes distort behaviour in employment- and growth-reducing ways, and that typically the distortion grows faster than the tax rate. An implication of this is that as tax scales become more progressive they increasingly negatively impact on long-run economic performance. This forms the analytical basis for the emphasis on effective marginal tax rates in traditional tax analysis.
49. That said, the appropriate level of redistribution is largely a political and social choice that requires a perspective wider than what tax policy analysis by itself can provide. However, tax analysis can help answer questions of the distributional and growth

¹⁰ Maghir, C. and Phillips D. (2007) '*Labour supply and taxes*' IFS draft, April 2007. and Gierz, S.H. (2007) 'The elasticity of taxable income over the 1980s and 1990s', *National Tax Journal*, LX, 4 (December), 743-768.

implications and trade-offs of any particular set of tax policies, and technical advice on delivering a given level of redistribution at least economic cost.

50. In summary we consider that a well-designed tax cuts programme can significantly improve the longer-run performance of the New Zealand economy. We would see well-designed cuts as capable of meeting equity goals under several of the above measures of equity, while also lowering marginal tax rates for full-time workers, particularly workers facing WFF abatement.
51. Therefore we consider that personal tax cuts most consistent with the government's Economic Transformation agenda would focus on reducing the average and marginal tax rates faced by full-time employees, with particular emphasis on compressing the existing structure of marginal rates. Such tax cuts would also be consistent with the Government's emphasis on encouraging private savings and investment. However in the absence of other initiatives tax cuts with solely this focus would potentially fail to adequately address the government's equity goals. Further on this report looks at options aimed at balancing the government's Economic Transformation and equity goals.

Developing a Strategy for a Multi-year Programme of Tax Cuts

52. Ministers have raised publicly the prospect of a multi-year tax reduction package. We understand that Ministers are considering a package of around \$4 billion spread over the next three budgets. Given the size and potential economic impact of a tax cuts programme, we see considerable merit in situating the current tax cuts within a broader and long-run economic strategy, such as the Economic Transformation agenda.
53. Therefore we suggest the Ministers consider a longer-run commitment to tax reductions. For instance signalling an intention to make a programme of tax reductions over say 10 years would help the initial tax cuts to be strongly situated within the government's strategic economic and social policies. A policy of long-term tax reductions founded on the government's wider goals would have several advantages:
 - It could reduce taxpayer and investor uncertainty regarding tax policy.
 - It provides a framework for dealing with the dilution of the original tax cut goals as inflation and wage growth erode the real value of tax-rate thresholds.
 - It increase the likelihood of the tax system evolving in a way which is consistent with the government's economic and social goals.
 - It may increase acceptance of initial tax reductions focusing on one group of taxpayers, if the initial reduction can be credibly presented as part of a longer strategy that addresses high-priority areas first. In the absence of a long-term policy the government may end up making a series of ad-hoc tax reductions.
 - The tighter budget constraint increases incentives to prioritise expenditure and seek public sector productivity improvements.
 - It could manage the inflationary impact of tax cuts by facilitating a series of small regular changes rather than infrequent larger changes, ie the tax cuts become more like annual incremental spending increases.
54. The two key disadvantages are the opportunity cost of the government expenditure, and a risk that tax cuts are expected, even if the fiscal situation did not warrant them.

Avoiding this would require a strong message of conditionality or conservative plans which minimised the risk of adverse fiscal outcomes.

55. From a fiscal strategy perspective, we'd note that:
- on-going tax cuts could potentially be funded from operating allowances from 2011 onwards (Budget 2007 projections assume an allowance (after demographic costs) of \$1.9 billion);
 - however projection year allowances are a lot smaller than allowances have been over recent years;
 - on-going tax reductions of around \$600 million would result in tax being allocated a significant portion of projected allowances;
 - hence such a strategy would require slower growth in some key areas of expenditure, health and education in particular, and on current projections would result in a faster decline in expenditure-to-GDP ratios from 2012;
 - freeing up extra headroom through reviewing baselines and tax base broadening would help make a program of ongoing tax reform sustainable. While we wouldn't want to underestimate the difficulty of freeing up headroom to fund ongoing tax reductions, the government would have three years in which to identify or develop options for the part or full funding of tax reductions from the 2011 Budget onwards;
 - from a long term fiscal perspective (eg 40 years), on-going tax reductions imply tighter future expenditure constraints than would otherwise apply.
56. Once a tax cut package extends beyond one year, Ministers face choices across a range of issues including:
- how to best and how precisely to articulate the end-point and transition paths;
 - the size and phasing of the total package;
 - the extent to which the commitment is reflected in budget allocations;
 - links other tax rates (most notably company tax); and
 - any fiscal and macro conditionality around the long-term commitment.
57. We would advise that if a longer-term commitment is made, the nature of the commitment and conditionality should be appropriate to the time scale. As the cone of fiscal and policy uncertainty increases in the out-years we would expect the commitment and conditionality to change to reflect this. One option would be to separate a more committed rolling 3 year package from a more conditional longer-term signalling of intentions.
58. At any point in the tax reduction process the ultimate total size and timing of a series of tax reductions will probably not be known. Future reductions will always be contingent on fiscal and economic performance and expenditure control. The risk that a programme of tax cuts will only be partially implemented needs to be managed. In practice this means developing transition paths that balance the Government's long-term and short-term priorities, and ensuring that each round of tax cuts contributes to key government policies in its own right.
59. Difficult transition paths can easily emerge. For example, governments face strong pressures to ensure that low income earners benefit from tax cuts. If however cuts for low income earners are over-weighted in the initial years of a multi-year programme (compared to a linear approach), in later years the remaining tax cuts required to achieve the government's goals will disproportionately advantage higher income earners. Even with a strong long-term strategy the distributional implications of the subsequent tax cuts, isolated in time from the earlier measures, can make such tax cuts difficult to sustain. The government's long-run aims are more likely to ultimately

be delivered if the design of each round of tax cuts balances both the Government's short-run priorities and its long-run objectives.

60. Recent Australian experience shows how a continuing programme of incremental tax changes can have a significant cumulative effect, even though several of the changes are, judged by themselves, relatively modest. The chart below shows how changes in the Australian personal tax scale implemented or announced over the last 5 years have moved the New Zealand and Australian income tax scales from a position of broad comparability (and with high-income Australians paying more tax), to a position where Australians pay significantly less tax across the income range shown.¹¹

Figure 4: Extent to which NZ income tax exceeds Australian income tax by income level



61. The cumulative cost of the Australian tax changes shown above is about \$40 billion, or something over 3% of GDP, spread over 7 years. For New Zealand reductions of 3% of GDP would cost \$6-\$6.5 billion.
62. The attached annex analyses the Australian tax changes in more detail, including their design, policy motivations and some consequential pressure-points for our tax system.

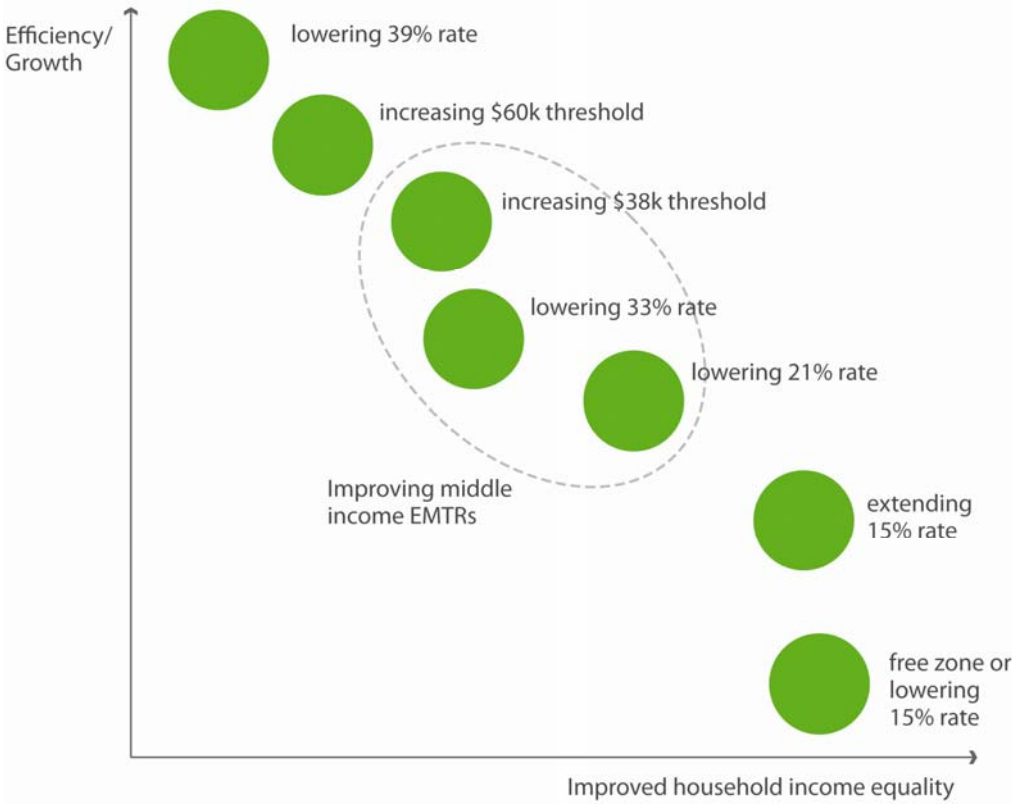
Illustrative Scenarios

63. Attached are sheets describing three long-term tax reduction scenarios that draw on the discussion above, plus for comparison a short run scenario A describes a 10/20/30% tax scale, and the latest scenario requested by your office.
64. With the three Treasury scenarios the main differences are at the low income end:
- A Free Zone scenario
 - A Low Rate scenario
 - A 15% Rate scenario

¹¹ Although due to a top rate of 45% still applying in 2011, total Australian income tax will exceed NZ income tax at incomes above \$295,000.

- 65. The Treasury scenarios present short-term (2011) and long-term (2018) options. All short-term options have about the same fiscal cost. Funding the long-term options requires using the fiscal headroom for the next three Budgets and then committing approximately \$600 million per Budget from the operating allowances over the seven Budgets from Budget 2011 through Budget 2017.
- 66. The Treasury options are illustrative in that they are designed to illuminate different strategic choices that can be made. The options could be modified somewhat while still maintaining their essential characteristics.
- 67. As discussed earlier, in designing a tax cuts programme Ministers face a trade-off between the government's growth and equity objectives. In developing our options we assessed the efficiency and equity implications of different elements of the tax cuts package. This is represented graphically as follows:

Figure 5: Different tax-cut options have different trade-offs

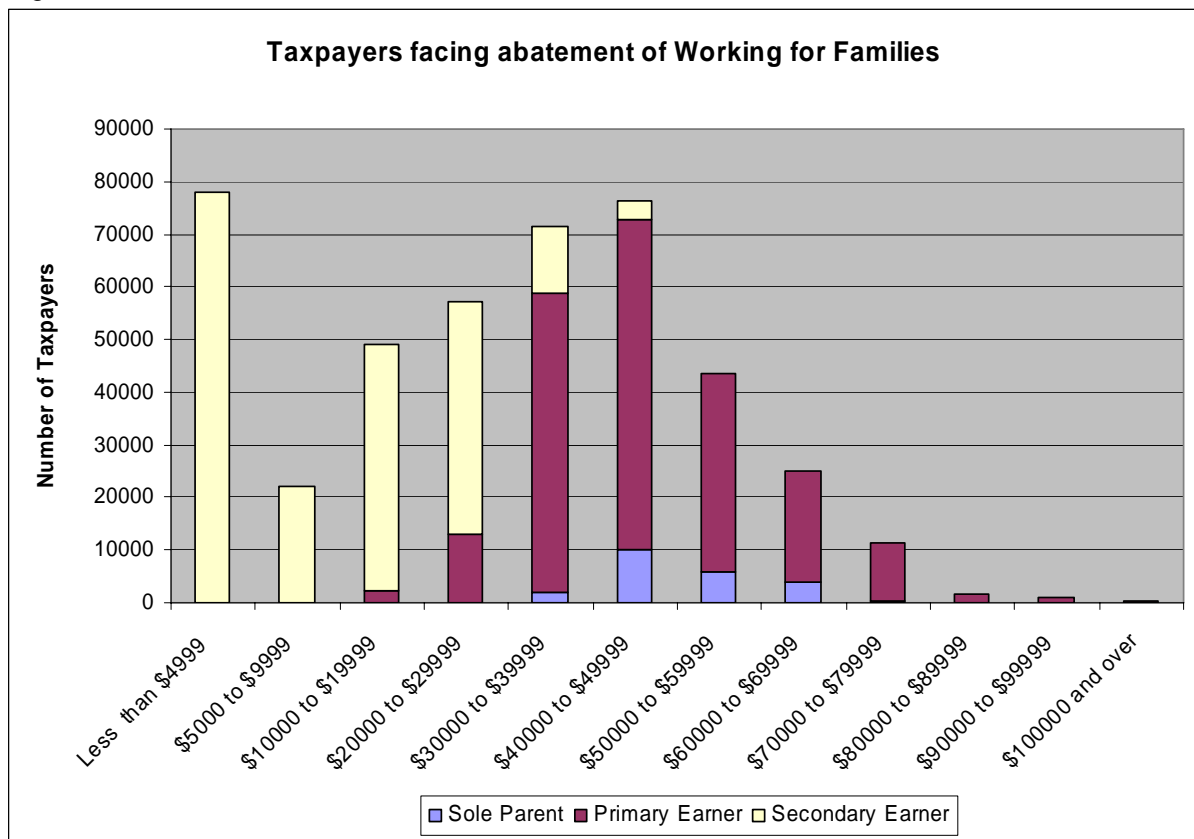


- 68. Key conclusions were that:
 - extending the 15% rate beyond \$9,500 without lowering the rate below that point scores almost as well as other options on equity grounds while significantly alleviating the negative effect on in-work incentives of other options that lower the 15% rate below \$9,500;
 - substantially increasing the \$60,000 threshold generates much of the growth advantages associated with lowering the 39% rate (in part this conclusion is due to the 30% company and PIE tax rates);
 - ranking the relative merits of initiatives in the middle of the income range – lowering the 21% or 33% rate, or increasing the \$38,000 threshold – requires finer judgements. However lowering the 33% rate or increasing the \$38,000 threshold will likely have greater productivity benefits than lowering the 21% rate.

Nevertheless there are a relatively wide range of options in this space that would have significant efficiency benefits.

69. In addition our scenarios sought to shift thresholds from heavily populated parts of the labour force income distribution. The current thresholds of \$38,000 and \$60,000 fall in the most densely populated part of the income distribution for those in full-time work (see figure 6 below), and are close to the full time average incomes of \$40,000 for women and \$49,000 for men respectively¹².
70. We also considered the number of people affected by EMTRs associated with Working For Families. Those numbers peak at around \$50,000 of income (leaving aside the large number of people with very low incomes in the first column). Note that as this data counts affected taxpayers it double-counts multiple earner households, as for example a couple earning \$40,000 and \$5,000 both face WFF abatement.

Figure 6:



71. Shifting the thresholds away from these peaks reduces the number of taxpayers affected by the thresholds and reduces the numbers affected by fiscal drag, and reduces EMTRs on taxpayers facing Working For Families abatement. Relatedly we aimed to avoid large changes in marginal rates at each threshold change (currently the largest shift is moving from 21% to 33% at \$38,000).
72. In the event that the efficiency benefits of such options are otherwise equal, we would see merit in placing weight on the impact of the competing options on tax system integrity. That would lead to considering reducing the numbers of marginal rates and to aligning these for as many taxpayers as possible to the company tax rate.
73. In addition we made a number of limiting assumptions to make the analysis more relevant to the decision at hand:

¹² QES, Dec 07 quarter.

- Although we see considerable merit in a long-run objective of lowering the 39% rate, we understand that you do not wish to consider changes to the 39% rate at this time. Therefore our options take the 39% rate as fixed, and only adjust its threshold. If you are interested in longer-run options that include changes in the 39% rate the examples can readily be reworked to do so. As we have significantly increased the 39% threshold the fiscal cost from subsequent reductions in the 39% rate would be relatively small.
- All options assume that the current GST rate and base is unchanged. At current rates GST is less damaging than income tax, implying national welfare can be increased by reducing income tax and raising GST. In addition to your own concerns regarding increasing GST, we have concerns that, while this is a good idea in theory, increasing the GST rate may provoke significant base erosion, undoing many of the efficiency advantages that underlie arguments to increase it. Local body rates, food, medical, education and fuel expenses would all be sources of risk, with ongoing low-level pressure for a GST concession. Therefore, as GST does not distort decisions as much as income tax, at a minimum we recommend that reductions in the GST base or rate not form part of the government's tax reduction package. We also recommend that Ministers maintain flexibility by not ruling out future increases in the GST rate as part of longer term tax packages.
- We assume the current income tax base is not materially changed, implying no comprehensive capital gains tax. This reflects what appears to be a broad political consensus on this issue. We have previously advised that the absence of a capital gains tax puts more pressure on extant elements of the tax system, such as the interaction between company and personal tax rates.
- The scenarios are evolutionary. We have not contemplated structural changes to the personal tax and company tax systems, such as a dual income tax system for taxing capital, or changes to company tax rates. Depending on the options chosen, we may recommend consequential changes to company and other tax rates.

Conclusion

74. The tax cuts package will be the largest single fiscal initiative to date in the term of the government. It has the potential to contribute to the government's goals regarding improved economic performance and more modestly contribute to its income distribution goals.
75. We consider that tax scale changes poorly target low-income earners of likely policy concern. About 92% of those earning less than \$18,000 (which was picked as its 30 hours a week at the minimum wage) appear to be of limited concern from a tax perspective, as they either receive directly other forms of government income support, or live in households with significant household income. Also people who are primary earners without other sources of income (i.e. those with genuine, persistent low incomes) tend to be in the \$15,000 to \$20,000 bracket, suggesting less need to focus on lower incomes, even from an inequality point of view.
76. We have analysed the free zone, low initial rate and extending the 15% rate from an income redistribution perspective and find that they generate very similar results. The income differences between the scenarios are a small fraction of forecast average annual nominal income growth.
77. Given their broad comparability from a household income inequality perspective, we have heavily weighted the potential dynamic gains of these three options. This leads

us to conclude that extending the 15% rate offers the best trade-off in advancing both the governments equity and efficiency objectives, as it offers significantly superior potential participation and productivity benefits.

78. Should you have residual concerns in this area we could explore targeted instruments (e.g. extending the In-Work Payment to those without children) as a possible alternative way to boost low incomes for a sub-set of those with low taxable income.
79. Other tax-reduction features that we consider most supportive of the government's productivity goals is to significantly reduce EMTRs for the majority of those in full-time work, and those facing WFF abatement, and to push out the 39% threshold so relatively few taxpayers are exposed to it. The scenario that best reflects these features is scenario E.
80. The element of scenario A that reduces the 39% rate to 30% has considerable merit from an efficiency, productivity and integrity perspective. If the assumption retaining the 39% rate was relaxed we would look to incorporate a change along those lines into the other scenarios.
81. Lastly, we see advantages in incorporating a tax reduction programme into your long-term fiscal strategy and of articulating longer term goals for the tax system.

Annex

Australian Personal Income Tax Reform

1. The Australian Labor Government has recently introduced legislation to enact personal income cuts. The tax cuts, to be implemented over the next three years, extend the threshold for the 30% rate, extend the effective free zone for low income earners to \$16,000 by increasing the Low Income Tax Offset and reduce the second highest personal tax rate from 40% to 37%.
2. The Australian Treasurer Wayne Swan has stated that these tax cuts will draw more Australians into the labour force, enhance incentives for taxpayers to acquire higher skills, and are a “down payment” on a more internationally competitive tax system that will help to attract and retain highly skilled workers.
3. Wayne Swan has indicated that increasing labour supply is a key component of the new government’s plan to tackle inflation; tax cuts are seen as an important element of this. Modelling by the Australian Treasury suggests that the tax cuts will increase labour supply by around 65,000 persons in the medium term.
4. The changes introduced also build on reforms by the Liberal-led Government since 2000. This continuing programme of tax reform has substantially changed the shape of the Australian personal income tax system and is moving towards the aim of 80% of Australian taxpayers facing marginal tax rates of under 30%. Table 1 shows the Australian personal income tax system in 1999/00, 2007/08 and proposed system for 2010/11.

Table 1: Australian statutory personal income tax schedule for 1999/00, 2007/08 and 2010/11

Tax thresholds for 1999/00	Tax rate %	Tax thresholds for 2007/08	Tax rate %	Tax threshold for 2010/11	Tax rate %
0-5400	0	0-6000	0	0-6000	0
5401-20700	20	6001-30000	15	6001-37000	15
20701-38000	34	30001-75000	30	37001-80000	30
38001-50000	43	75001-150000	40	80001-180000	37
50001+	47	150001+	45	180001+	45

5. Table 2 shows the value of the Low Income Tax Offset.

Table 2: Value of the Low Income Tax Offset and resulting effective free zone for selected years

	1999/00	2007/08	2010/11
Low Income Tax offset	150	750	1500
Resulting effective free zone	6150	11000	16000

6. The Treasurer indicates that the tax reform will be further supported by initiatives such as a child care tax rebate and additional skills training positions.

Australian Labor Government Programme of Personal Income Tax Reform

7. The details, objectives, and policy context for the personal income tax reform bill recently introduced by the new Australian Labor Government are summarised below.

Tax cuts are spread across the income distribution: a person with taxable income of \$20,000 will pay around 56% less tax; a person with taxable income of \$50,000 will pay around 18% less tax; and a person with taxable income of \$100,000 will pay around 8% less tax.

8. The proposed reforms focus on three aspects of the Australian tax system:
- Increasing the 30% threshold (currently \$30,000, with income below this rate and above the free zone taxed at 15%).
 - Increases to the Low Income Tax Offset (“LITO”). The LITO is a tax credit available to those on low incomes that effectively extends the tax free zone. The LITO’s value abates at a rate of 4 cents for every dollar earned above \$30,000; abatement exhausts the value of the LITO at \$48,750. The LITO is currently worth \$750 and creates an effective free zone of \$11,000; abatement of the LITO creates an effective rate of 34% from \$30,000 to \$48,750.
 - Reductions to the 40% marginal tax rate on income between \$80,000 and \$180,000.
9. The changes in the February legislation propose the following phased changes:
- From 1 July 2008 the 30% threshold is extended to **\$34,000** and the LITO is increased to **\$1,200** (giving an effective free zone of \$14 000).
 - From 1 July 2009 the 30% threshold is increased to **\$35,000**, the LITO increased to **\$1,350** (effective free zone of \$15 000) and the 40% rate is reduced to **38%**.
 - From 1 July 2010 the 30% threshold is increased to **\$37,000**, the LITO increased to **\$1,500** (effective free zone of \$16 000) and the 40% rate is reduced to **37%**.
10. The proposed changes have a four year revenue cost of \$30 billion; this is equivalent to around 0.7% of GDP per annum in 2010/11.

The stated objectives of the Australian tax reforms are to create a more internationally competitive tax system, increase labour force participation, and enhance incentives for taxpayers to improve their skills and gain higher qualifications.

11. Treasurer Swan has indicated the changes to the LITO and 30% threshold are intended to significantly improve financial incentives for secondary earners and those on benefits to enter the workforce or to increase their hours of work. The Australian Government sees this increase in participation as a key component of its plan to tackle inflation.
12. The Australian Treasury estimates that the tax reform package will lift labour supply by around 65,000 people in the medium term (an increase to labour force participation of approximately 0.6%).¹³ Its work suggests that taxes are more likely to influence

¹³ Estimates are provided by a behavioural micro-simulation model developed by the Australian Treasury in partnership with the Melbourne Institute. Attaining a level of confidence regarding estimates has required investment of substantial time and resource by the Australian Treasury

decisions to enter the workforce or to increase part time hours of work for secondary earners or beneficiaries. Moreover these taxpayers often face high EMTRs from welfare or family assistance abatement. This is consistent with our understanding of the impacts of taxes on labour supply; taxes tend to affect individuals with the greatest discretion regarding hours worked.

13. [information supplied subject to obligation of confidence]
14. Other features of the Labor Government's reform programme target improvements in labour force participation, such as child care tax credits and extensions to the Senior Australian's Tax Offset.

The cumulative impact of an ongoing programme of tax reform is a substantial change in the shape of the Australian personal income tax system and the levels of income tax paid in Australia.

15. The tax changes proposed by the Australian Labor Government build on the changes made by previous governments. Rates and thresholds have been adjusted each year since 2003/04 and tax changes were also introduced in 2000/01. Prior to the 2000/01 changes, personal income tax rates had been unchanged since 1994/95.
16. Recent changes have significantly extended thresholds for the top two marginal tax rates and have increased the LITO and 30% rate threshold. Marginal tax rates at the bottom and the top have also been reduced; the current 15% rate was reduced from 17% from 1 July 2005 and from 1 July 2006 the 45% was reduced from 47% and the 40% rate from 42%.
17. Labour participation modelling by the Australian Treasury suggests that the programme of tax reform from 2000/01 through to 2010/11 could result in a long term increase of up to 300,000 people to the labour force (total labour force participation in Australia is currently around 11 million, so this represents an increase of up to 2.5%).¹⁴ To place these estimated increases into context, between June 2000 and January 2008 the Australian labour force expanded by 1.4 million people. The Australian Treasury estimates that the tax changes up to 1 June 2007 contributed between 200,000 and 250,000 towards this increase.
18. This continuing programme of tax reform has substantially changed the shape of the Australian personal income tax system. The cumulative cost of the personal tax reductions since 2003 and those proposed by the new Labor Government exceeds \$40 billion per annum by 2010/11; this would be equivalent to more than 3% of GDP.¹⁵ Table 1 shows the Australian personal income tax system in 1999/00, 2007/08 and proposed system for 2010/11.

(around 18 months). We do not have similar capability and would not be in a position to estimate labour supply responses with this precision for any tax changes included in Budget 2008.

¹⁴ Total labour force participation in Australia for January 2008 was 65.2%; participation was 72.5% for males and 58.1% for females. This compares with higher total participation in New Zealand of 68.8% for the December 2007 quarter; participation was 75.4% for males and 62.4% for females.

¹⁵ For New Zealand tax reductions of 3% of GDP in 2010/11 would cost between \$6 and \$6.5 billion.

Table 1: Australian statutory personal income tax schedule for 1999/00, 2007/08 and 2010/11

Tax thresholds for 1999/00	Tax rate %	Tax thresholds for 2007/08	Tax rate %	Tax threshold for 2010/11	Tax rate %
0-5400	0	0-6000	0	0-6000	0
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38001-50000	43	75001-150000	40	80001-180000	37
50001+	47	150001+	45	180001+	45

19. Table 2 shows the value of the Low Income Tax Offset.

Table 2: Value of the Low Income Offset and resulting effective free zone for selected years

	1999/00	2007/08	2010/11
Low Income Tax offset	150	750	1500
Resulting effective free zone	6150	11000	16000

Changes to the level of income tax paid in Australia highlight potential vulnerabilities in a New Zealand context.

20. Given your current focus on personal tax changes in New Zealand you may be interested in issues the Australian changes might raise at different points on the New Zealand income tax scale. While we would caution against any over simplistic focus on direct comparisons between the scales without considering the wider context, the changes may raise the following “vulnerabilities” which you may wish to consider:

- While Australia’s tax free zone has meant that average tax rates have been low at low incomes, the extensions to the LITO and the 30% threshold have reduced average tax rates for taxpayers on moderate to middle incomes.
- From 1 July 2006 thresholds for the two top marginal tax rates were extended significantly reducing taxes for those earning in excess of \$75,000. Further changes to the thresholds from 1 July 2008 and reductions to the 40% rate will reduce taxes further.

21. The impact of these vulnerabilities can be seen in Figure 1 which shows the difference in personal income tax paid in New Zealand and Australia at different proportions of the New Zealand average wage (using New Zealand’s current tax schedule). The gap between taxes paid in New Zealand and Australia that has emerged in recent years will be widened by the changes proposed by the Australian Labor Government. We have used Purchasing Power Parity values to convert all figures into New Zealand dollar equivalent amounts; a positive value means more tax is paid in New Zealand. Note that the analysis in figure 1 considers personal income taxes only. A more thorough analysis would include other employer costs such as payroll taxes, the Medicare levy and our ACC levy. It should be noted that if we were to extend the analysis to include other taxes, it would not materially affect the difference in net disposable income received by Australian or New Zealand workers on equivalent wages.

Figure 1: Comparison of tax paid in New Zealand and Australia in NZD equivalent amounts



Australia has also extended assistance for families with children, although not to the same degree as the changes arising from Working for Families

22. From 1 July 2000 Australia's Family Tax Benefit regime replaced existing forms of family assistance. The Family Tax Benefit A is available to families with children with part of the entitlement abating at lower incomes and the remainder at higher incomes (so has a two part abatement). The Family Tax Credit B is available to single parent families without abatement, and for two earner families abatement depends on the income the second earner. The value of the benefits and abatement thresholds are indexed, but have been increased above indexation in some years. The value of the Family Tax Benefit is lower for an Australian family on average income compared to Working for Families for a New Zealand family on average income.

Annex: Alternative Tax Scenarios

Page	Description
1	Scenario A – Short run – 10/20/30 scenario
2	Scenario B – Long run – Free Zone scenario (A)
3	Scenario C – Long Run – Free Zone scenario (B)
4	Scenario D – Long Run – Low Rate scenario
5	Scenario E – Long Run – 15% Rate scenario
6	Comparative Analysis – Marginal tax rate changes and weekly tax savings
7	Comparative Analysis – Change to disposable income by household disposable income decile
8	Comparative Analysis – Australian Comparison
9	Comparative Analysis – Equity Measures Comparative Analysis – EMTR Analysis

Description of Analysis

Analysis	Description
Fiscal costs	Note that the fiscal costs have been presented on a change in disposable income basis, with a clawback rate of 17.1% on top of that. Other scenarios presented to you over previous months have taken this one step further and computed the residual cash position.
Change in EMTR table	This table is based on individuals. This table draws out the where the bulk of the fall in the EMTR's occur across the income distribution. Key target groups are those on incomes between \$30k and \$60k as this is where current EMTR's are highest given WFF abatement.
Marginal tax rate changes	Because the tax changes are over a number of years, we have used the proportion of the average wage on the x-axis. This effectively enables wage growth to be taken into account over time. We use the wage growth forecasts estimated in the HYEPU for the forecast period and 3.5% per annum in the projection period. Tax savings are in real dollars.
Australian comparison	This shows the difference of tax paid in NZ compared to Australia across percentages of average wages in New Zealand. For the purpose of this analysis, all the planned Australian tax cuts are factored in. It is also assumed that Australia will achieve its aspirational tax goals by 2018 - increasing the Low Income Offset such that the effective free zone is \$20,000, reducing the 37% rate to 30% and reducing their 45% rate to 40%.
Change in disposable income	Shows the distribution of the change in disposable income across household income deciles. The percentage increase in disposable income across households provides one measure of the extent to which the scenario is equitable across the income distribution. Beneficiaries do not benefit from tax reductions, so have been excluded from this analysis. Including beneficiaries would have understated changes to disposable income for other households in lower deciles.
Equality measures	Gini coefficient for disposable income: G=0 implies that household disposable income is perfectly proportional; G=1 implies the highest income household receives all the disposable income. Therefore a lower value of G implies improved income equality.
Of these two measures, we have a preference for the 80/20 ratio as we are most interested in deciles 3 to 8 from a tax perspective.	80/20 ratio: ratio of the 80th percentile of equivalised household disposable income to the 20th percentile of equivalised household disposable income. This is a measure of equality used in "The Social Report 2007" (MSD). A lower value indicates improved income equality.

Scenario A – Short run – 10/20/30 scenario

Design
by 1 April 2011
10% to \$12k
20% to \$38k
30% over \$38k

Fiscal Cost (\$ million)	2011/12
Chg to disposable income	-5428
less clawback (17.1%)	928
	-4500

This option is very positive in a tax integrity sense. It aligns with the company and the PIE rate and logically the trustee rate could also be reduced to create alignment. This effectively steps towards a flat-tax system.

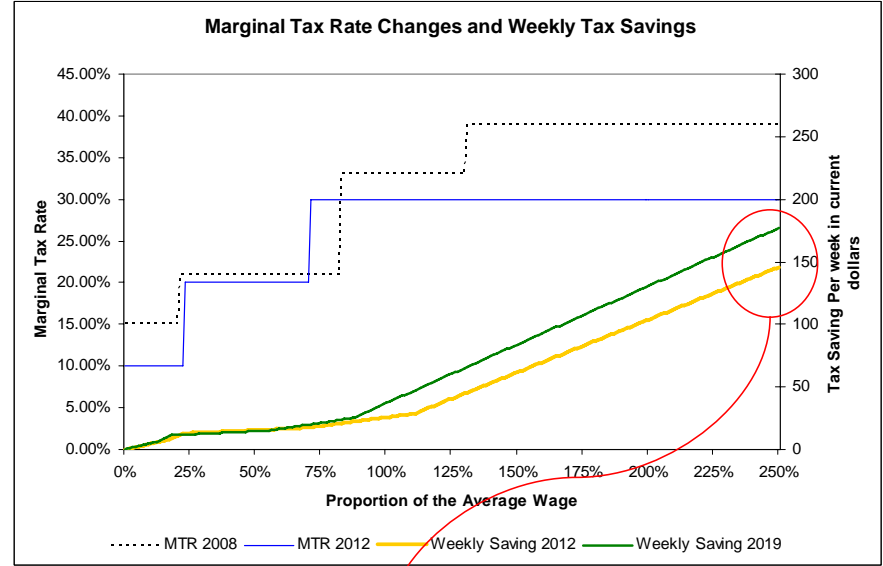
Incomes	Change in EMTR (2011)				
	Increase	No change	0 - 5% fall	5 - 10% fall	> 10% fall
\$0k - \$10k	SOME	33,553	569,867	20,501	44,790
\$10k - \$20k	SOME	SOME	597,983	7,273	100,382
\$20k - \$30k	7,443	0	484,140	SOME	SOME
\$30k - \$40k	SOME	0	282,602	0	0
\$40k - \$50k	0	0	297,835	0	SOME
\$50k - \$60k	0	0	272,726	0	0
\$60k - \$70k	0	0	SOME	169,324	0
\$70k - \$80k	0	0	0	123,536	0
\$80k - \$90k	0	0	0	108,930	0
\$90k - \$100k	0	0	0	53,549	0
\$100k+	0	0	0	181,569	0
Total	7,443	33,553	2,505,154	664,684	145,172

Equality measures	
Status quo Gini coefficient	0.353
New Gini coefficient (2011)	0.361
Status quo 80/20 ratio	2.942
New 80/20 ratio (2011)	2.933

Note that these indicators move in the opposite direction. Due to a lot of the gains going to those in the top 20% households.

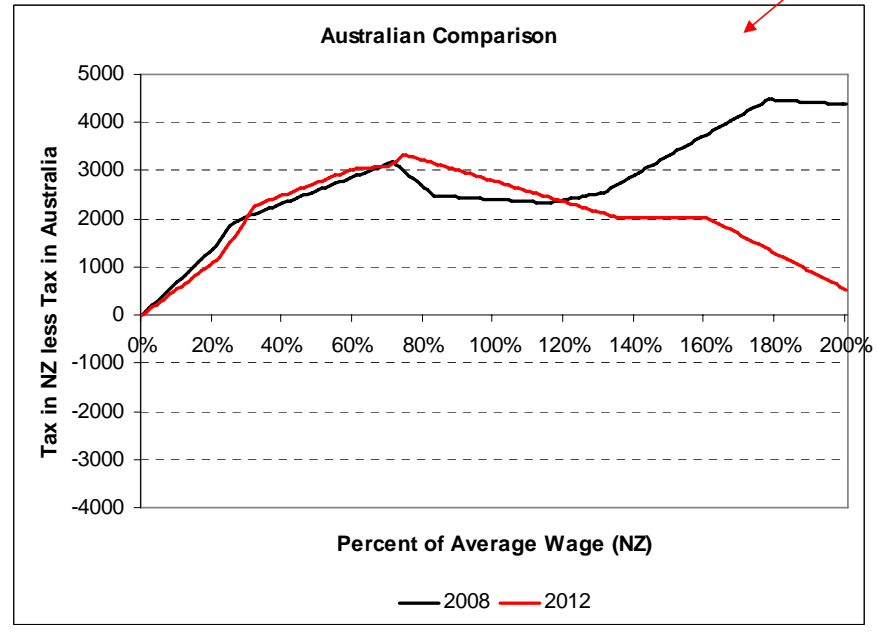
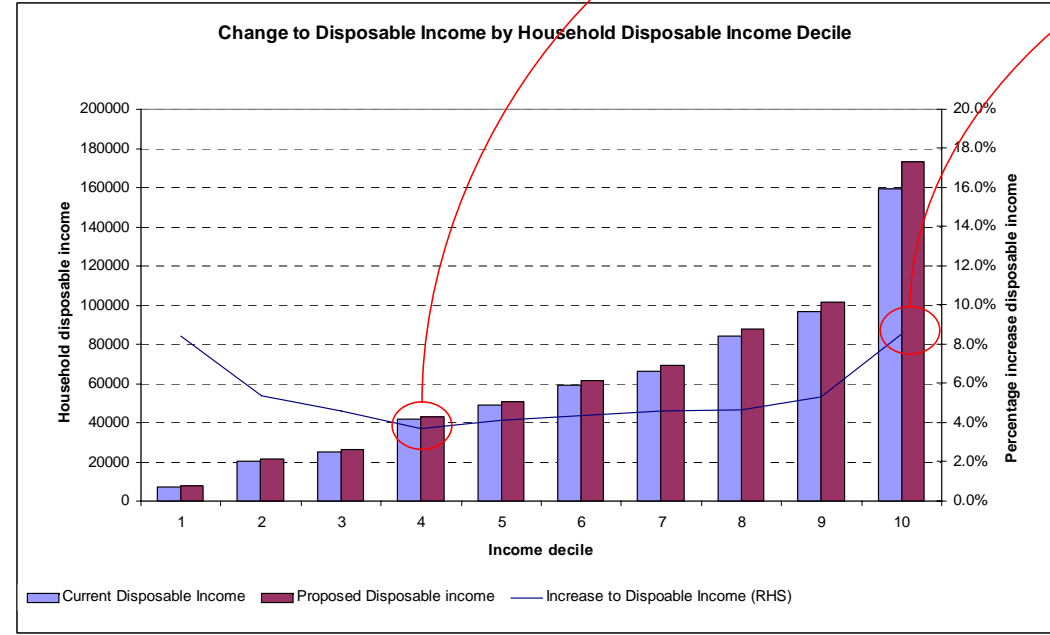
This scenario is poorly targeted to those most in need.

This scenario reduces EMTRs for the greatest number of people.



This is the only scenario that results in un-capped tax gains for those on high incomes.

No 2019 line in this chart as this is a short run option only.



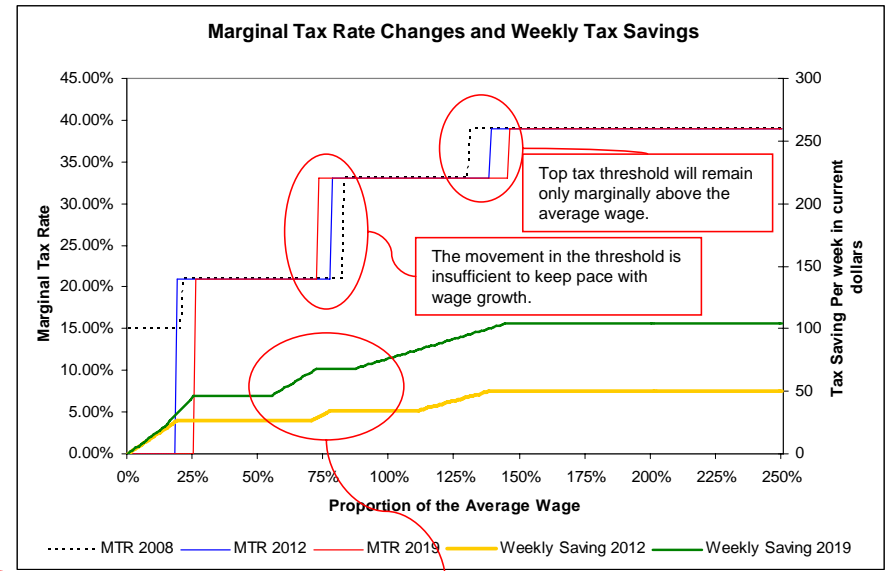
Scenario B – Long run – Free Zone scenario (A)

Design			
On 1 April 2009	On 1 April 2010	On 1 April 2011	On 1 April 2018
10% to \$10k	5% to \$10k	0% to \$10k	0% to \$17.5k
21% to \$40k	21% to \$41k	21% to \$42k	21% to \$50k
33% to \$70k	33% to \$70k	33% to \$75k	33% to \$100k
39% over \$70k	39% over \$70k	39% over \$75k	39% over \$100k

Fiscal Cost (\$ million)	2011/12	2018/19
Chg to disposable income	-5012	-12026
<i>less clawback (17.1%)</i>	857	2056
	-4155	-9970

Incomes	Change in EMTR (2011)				
	Increase	No change	0 - 5% fall	5 - 10% fall	> 10% fall
\$0k - \$10k	0	33,553	SOME	SOME	631,967
\$10k - \$20k	9,103	683,570	7,953	8,772	SOME
\$20k - \$30k	8,786	458,940	8,787	SOME	SOME
\$30k - \$40k	SOME	220,839	SOME	SOME	61,944
\$40k - \$50k	SOME	228,271	SOME	SOME	65,857
\$50k - \$60k	0	272,004	SOME	0	0
\$60k - \$70k	0	SOME	0	169,324	0
\$70k - \$80k	0	48,530	0	75,006	0
\$80k - \$90k	0	108,930	0	0	0
\$90k - \$100k	0	53,549	0	0	0
\$100k+	0	181,208	0	0	0
Total	17,888	2,289,395	16,740	253,103	759,767

Equality measures	
Status quo Gini coefficient	0.353
New Gini coefficient (2011)	0.348
Status quo 80/20 ratio	2.942
New 80/20 ratio (2011)	2.803

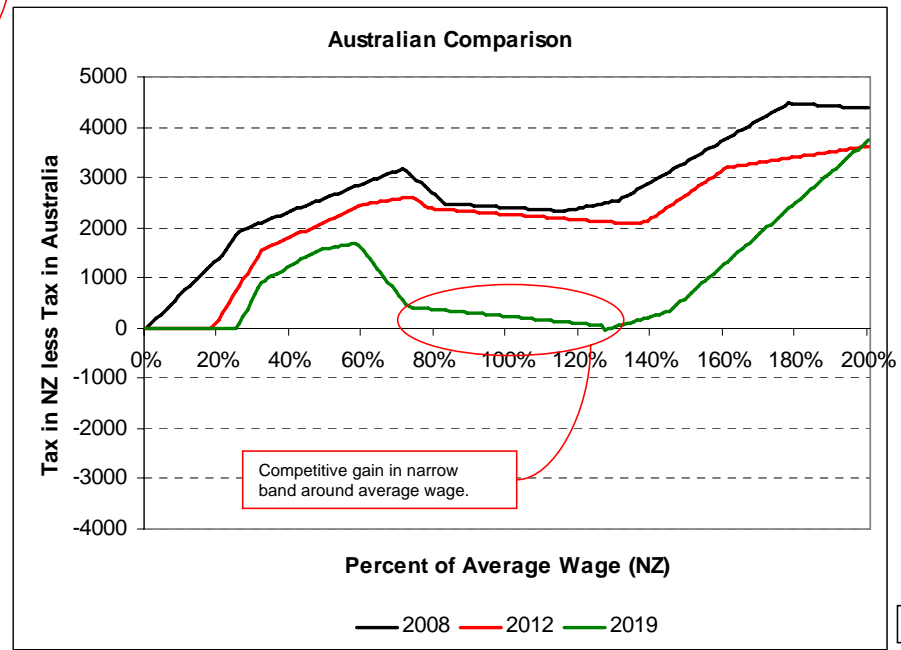
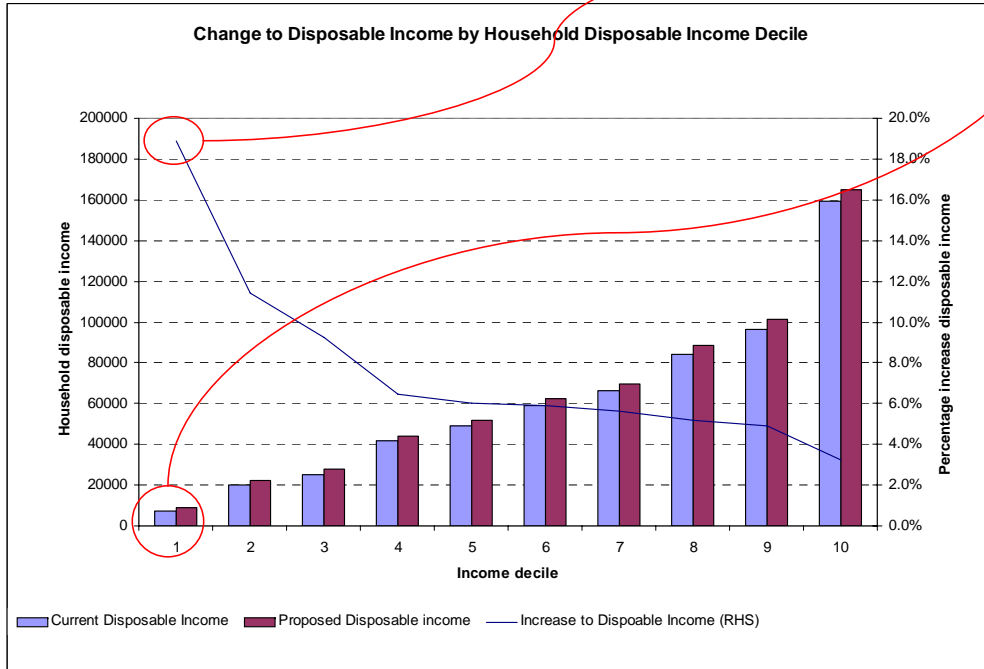


Of the 1.03 million people who get a reduction in their EMTR, 74% of those have incomes less than \$10,000.

This scenario shows the largest reductions in income equality.

Given the lumpiness of these tax gains, this may be interpreted as being unfair on a vertical equity basis.

The percentage increase in disposable income is very high while the absolute increase is very small.



Scenario C – Long Run – Free Zone scenario (B)

Design	
By 1 April 2011	By 1 April 2018
0% to \$6k	0% to \$10k
21% to \$48k	21% to \$60k
33% to \$100k	29% to \$150k
39% over \$100k	39% over \$150k

Fiscal Cost (\$ million)	2011/12	2018/19
Chg to disposable income	-4035	-11994
<i>less clawback (17.1%)</i>	690	2051
	-3345	-9943

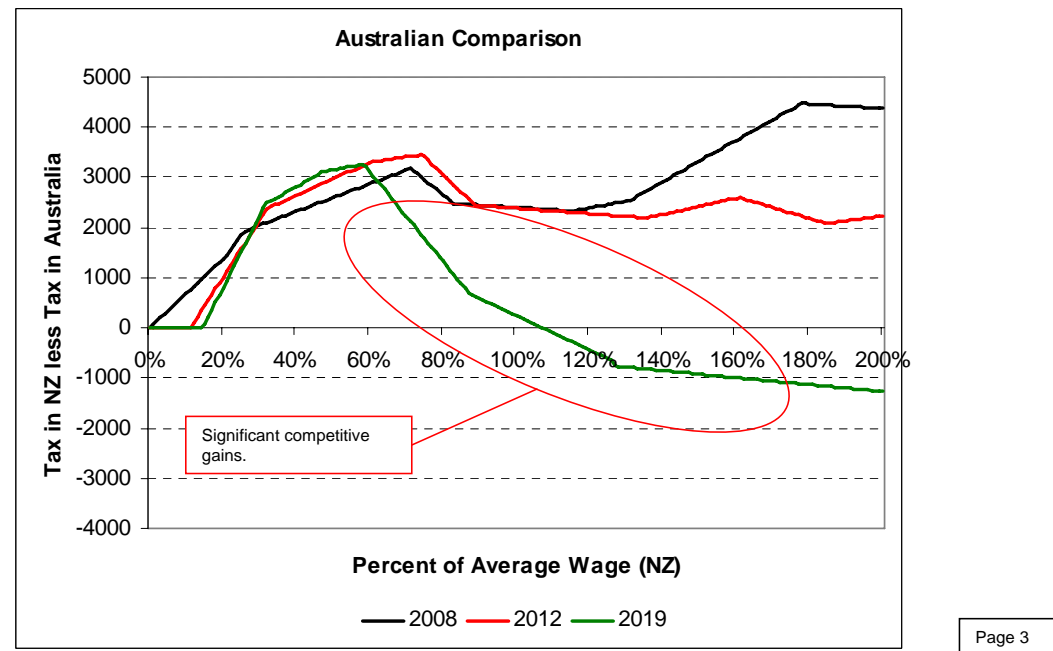
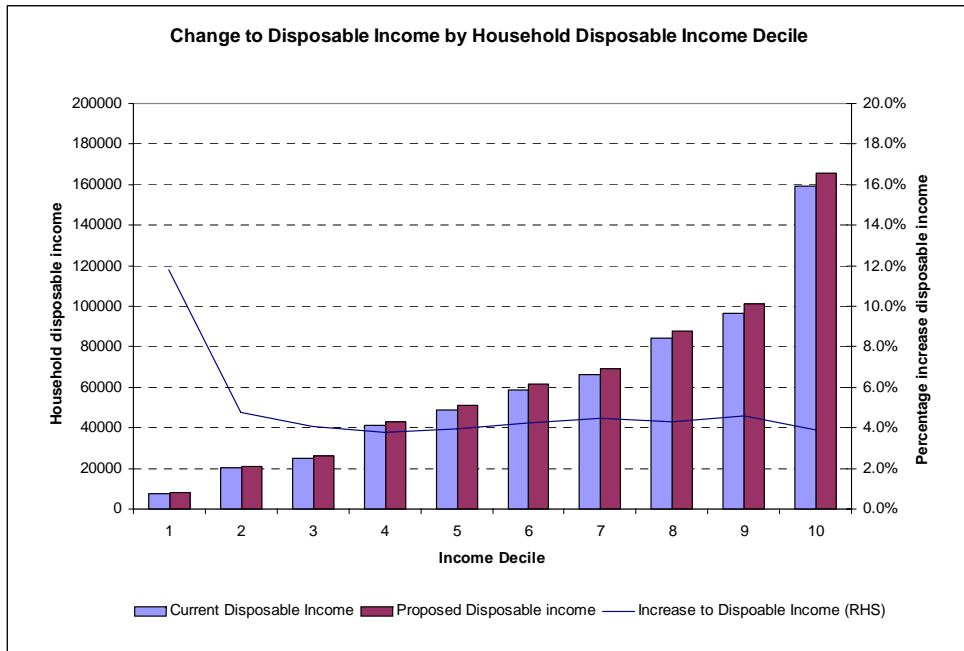
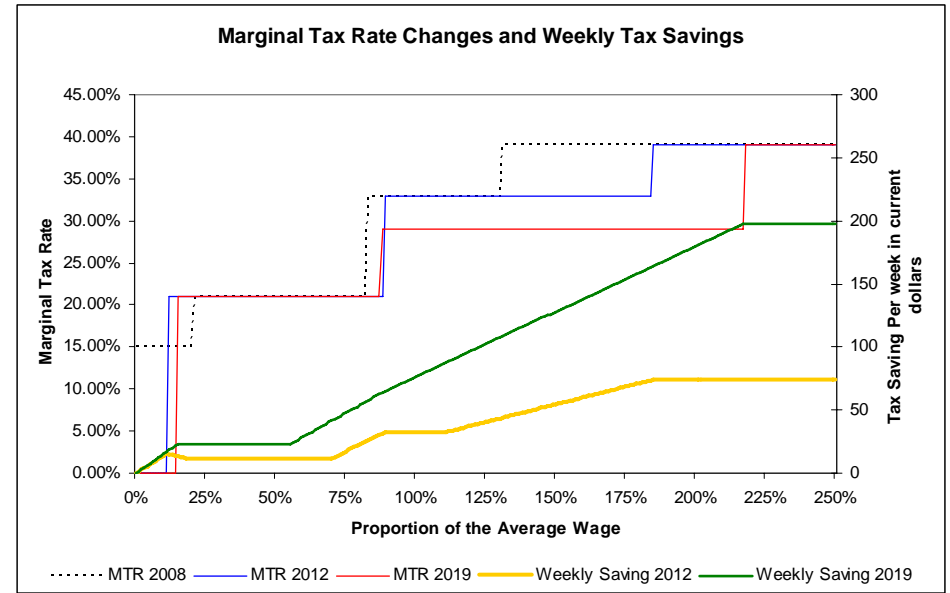
Free-zone designed to give same tax reductions (\$690 pa) as introducing a 10% rate to \$11.5k or a 15% rate to 21k.

Incomes	Change in EMTR (2011)				
	Increase	No change	0 - 5% fall	5 - 10% fall	> 10% fall
\$0k - \$10k	94,559	69,699	SOME	SOME	499,812
\$10k - \$20k	11,191	679,579	7,764	6,314	SOME
\$20k - \$30k	15,141	477,912	7,183	SOME	SOME
\$30k - \$40k	SOME	217,505	SOME	SOME	61,944
\$40k - \$50k	0	57,220	SOME	SOME	238,127
\$50k - \$60k	0	272,004	SOME	0	0
\$60k - \$70k	0	SOME	0	169,324	0
\$70k - \$80k	0	0	0	123,536	0
\$80k - \$90k	0	0	0	108,930	0
\$90k - \$100k	0	0	0	53,549	0
\$100k+	0	181,208	0	0	0
Total	120,890	1,955,128	14,947	461,654	799,883

Equality measures	
Status quo Gini coefficient	0.353
New Gini coefficient (2011)	0.354
Status quo 80/20 ratio	2.942
New 80/20 ratio (2011)	2.940

The bulk of the large reduction in EMTRs are to those on incomes that are less than \$6,000.

12% reductions in EMTRs due to moving the 38k threshold to 48k.



Scenario D – Low Run – Low Rate scenario

Design	
By 1 April 2011	By 1 April 2018
10% to \$11.5k	10% to \$20k
21% to \$38k	21% to \$60k
29% to \$100k	29% to \$150k
39% over \$100k	39% over \$150k

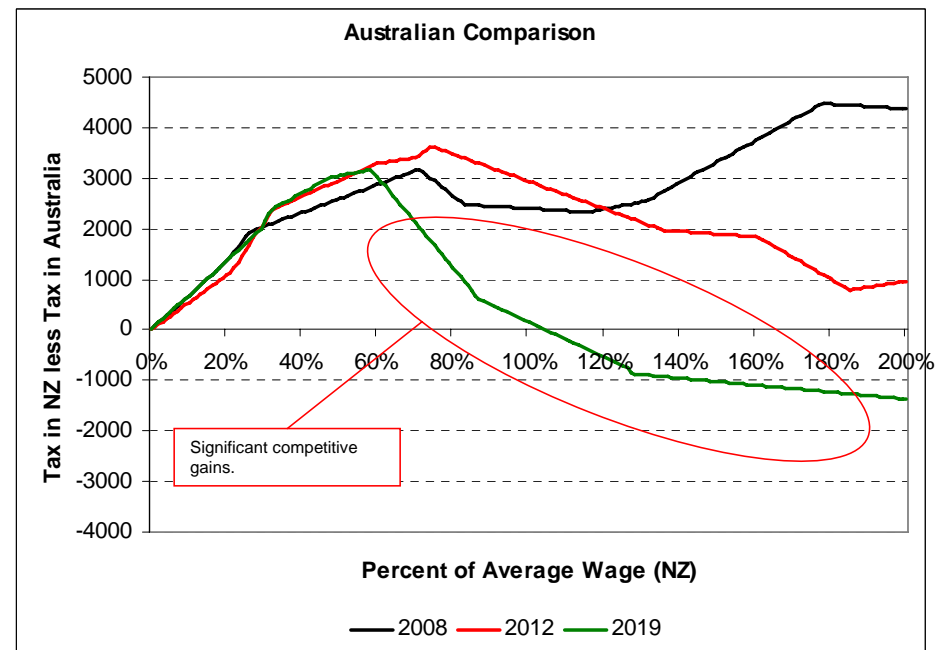
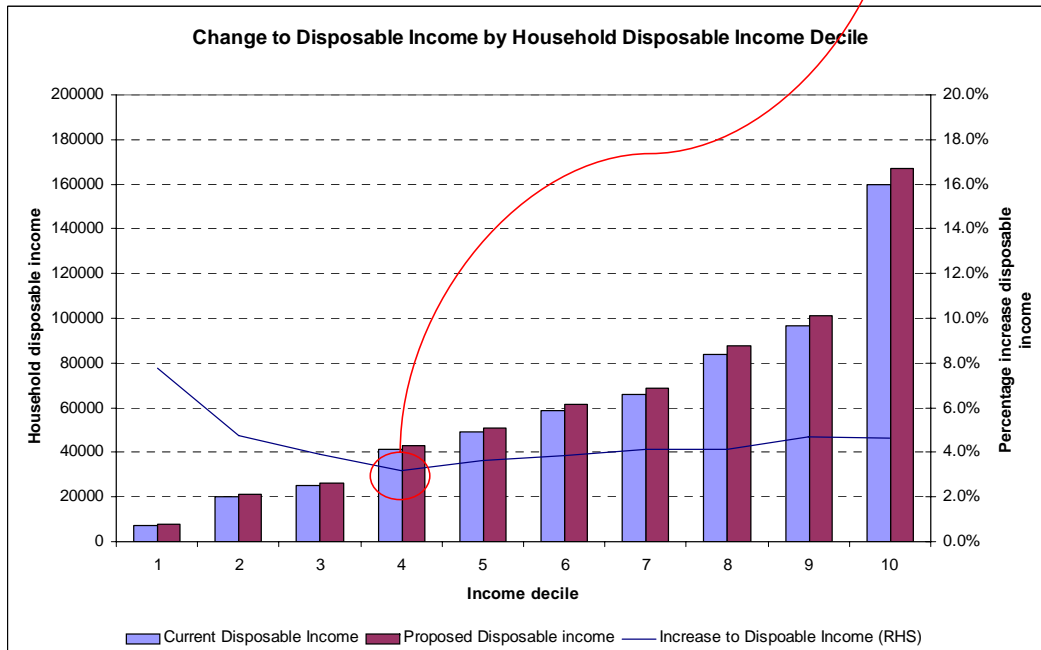
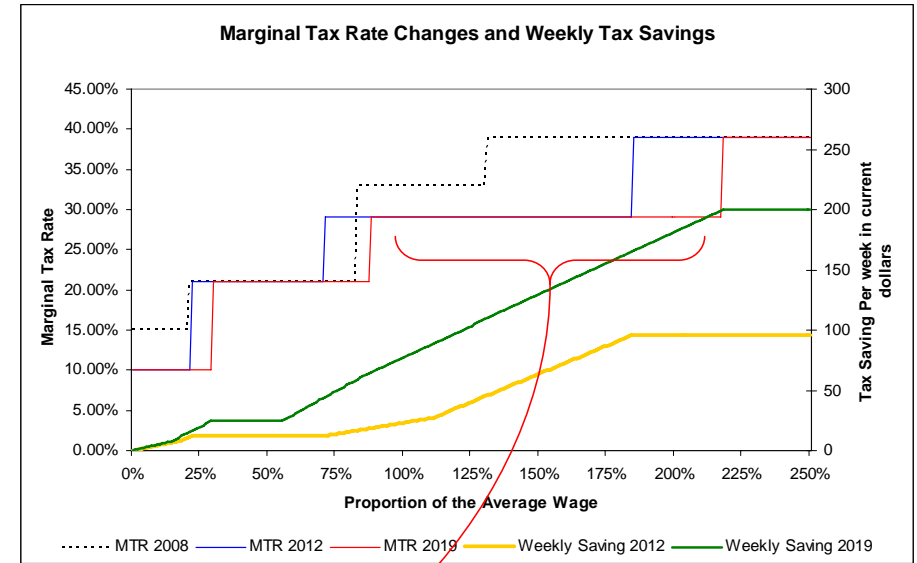
Fiscal Cost (\$ million)	2011/12	2018/19
Chg to disposable income	-4298	-11936
<i>less clawback (17.1%)</i>	735	2041
	-3563	-9895

Incomes	Change in EMTR (2011)				
	Increase	No change	0 - 5% fall	5 - 10% fall	> 10% fall
\$0k - \$10k	SOME	33,553	571,355	19,013	44,790
\$10k - \$20k	9,236	626,241	18,083	SOME	47,337
\$20k - \$30k	8,627	473,466	16,213	SOME	SOME
\$30k - \$40k	SOME	218,019	64,076	0	0
\$40k - \$50k	0	0	297,835	0	SOME
\$50k - \$60k	0	0	272,726	0	0
\$60k - \$70k	0	0	SOME	168,595	SOME
\$70k - \$80k	0	0	0	123,176	SOME
\$80k - \$90k	0	0	0	108,588	SOME
\$90k - \$100k	0	0	0	53,549	0
\$100k+	SOME	180,799	0	0	0
Total	17,863	1,532,078	1,240,289	472,920	92,127

Equality measures	
Status quo Gini coefficient	0.353
New Gini coefficient (2011)	0.356
Status quo 80/20 ratio	2.942
New 80/20 ratio (2011)	2.937

This scenario is poorly targeted to those most in need.

Larger EMTR reductions for middle to higher incomes.



Scenario E – Long Run – 15% Rate scenario

Design	
By 1 April 2011	By 1 April 2018
15% to \$21k	15% to \$38k
21% to \$38k	25% to \$150k
29% to \$100k	39% over \$150k
39% over \$100k	

Fiscal Cost (\$ million)	2011/12	2018/19
Chg to disposable income	-3821	-12051
less clawback (17.1%)	653	2061
	-3168	-9990

Good for integrity. Three rate structure. Changes to the company tax rate would also need to be considered. No long run RWT concerns, although short term transition may be a problem.

Increase is not significant.

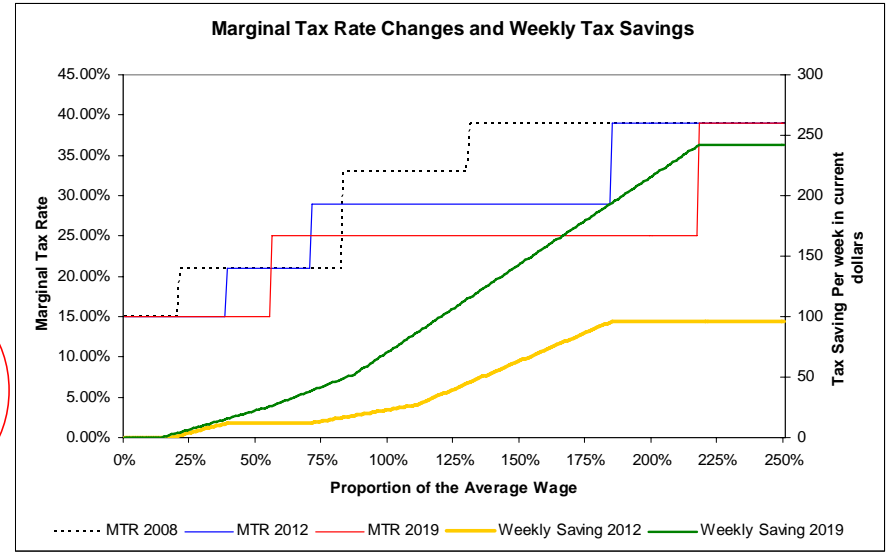
Incomes	Change in EMTR (2011)				
	Increase	No change	0 - 5% fall	5 - 10% fall	> 10% fall
\$0k - \$10k	9,963	611,143	10,445	6,771	SOME
\$10k - \$20k	0	SOME	39,973	778,195	0
\$20k - \$30k	7,910	312,065	18,262	80,277	SOME
\$30k - \$40k	SOME	219,433	63,238	0	0
\$40k - \$50k	0	0	297,162	0	0
\$50k - \$60k	0	0	273,603	0	0
\$60k - \$70k	0	0	0	168,595	SOME
\$70k - \$80k	0	0	0	123,176	SOME
\$80k - \$90k	0	0	0	108,588	SOME
\$90k - \$100k	0	0	0	53,549	0
\$100k+	SOME	180,799	0	0	0
Total	17,873	1,323,440	702,682	1,319,150	0

Equality measures	
Status quo Gini coefficient	0.353
New Gini coefficient (2011)	0.357
Status quo 80/20 ratio	2.942
New 80/20 ratio (2011)	2.971

These people have no reduction in their EMTR to 2011 but will over the longer term.

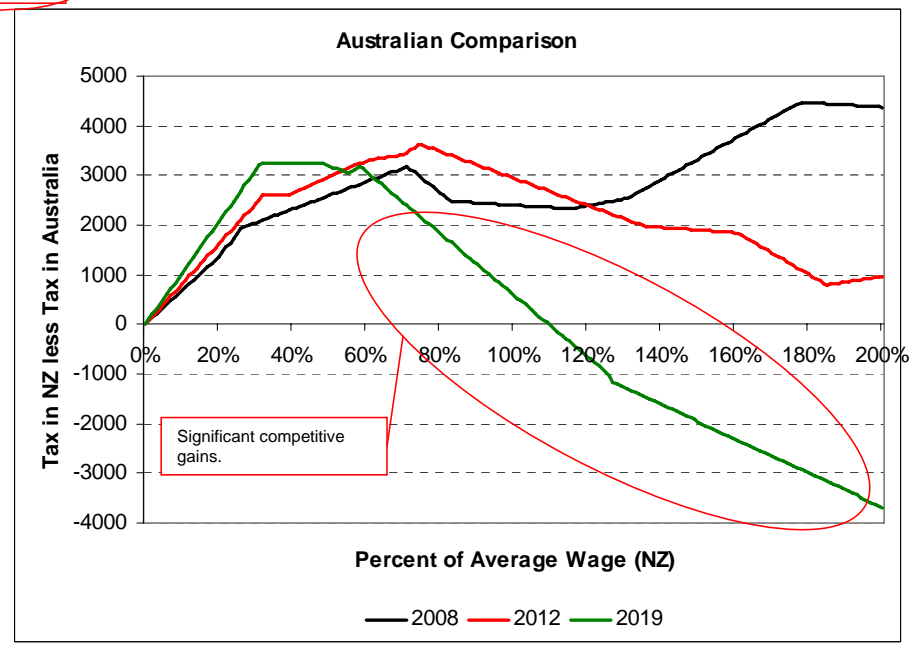
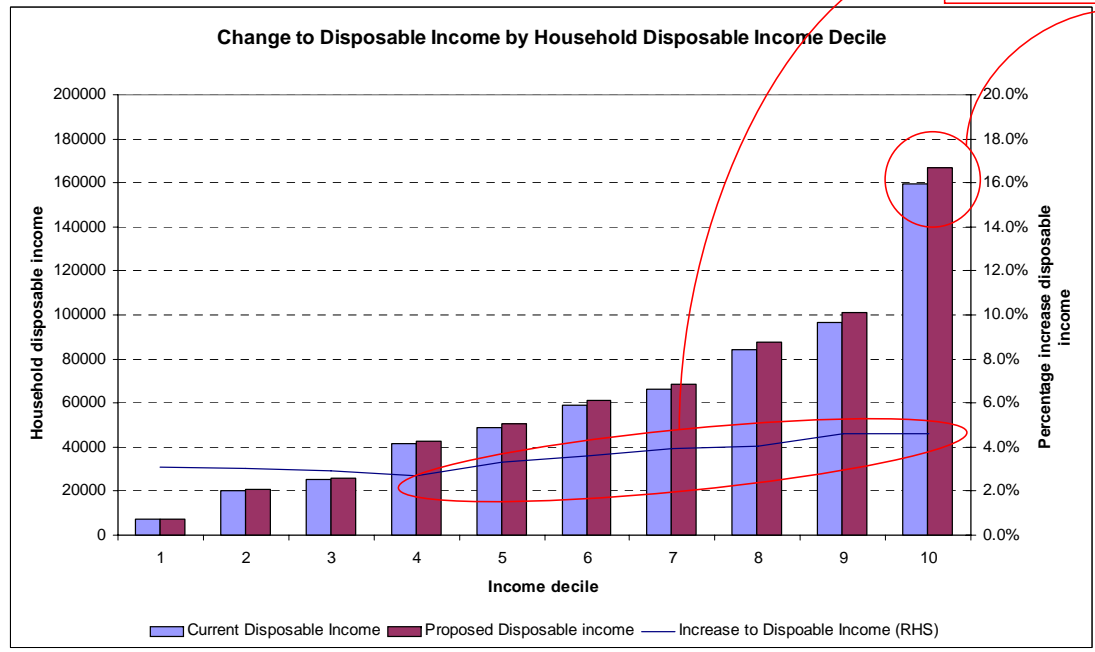
Larger EMTR reductions for middle to higher incomes.

Difference is only 2% of disposable income while nominal wage growth is 4% pa.



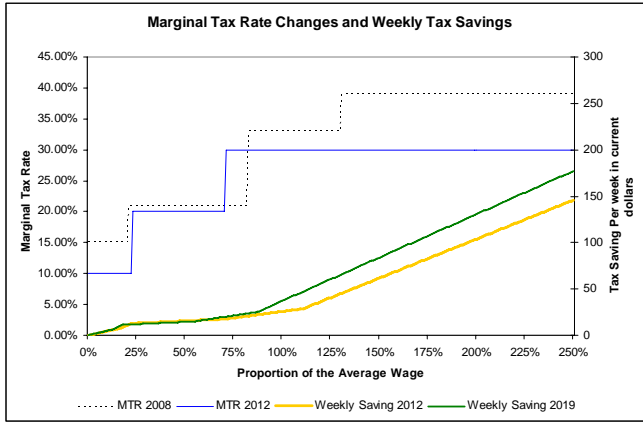
The top decile continues to pay 38% of total income tax.

Ranks well on traditional vertical equity considerations as distinguishes generally only poor and rich. Middle income taxpayers are treated equally.

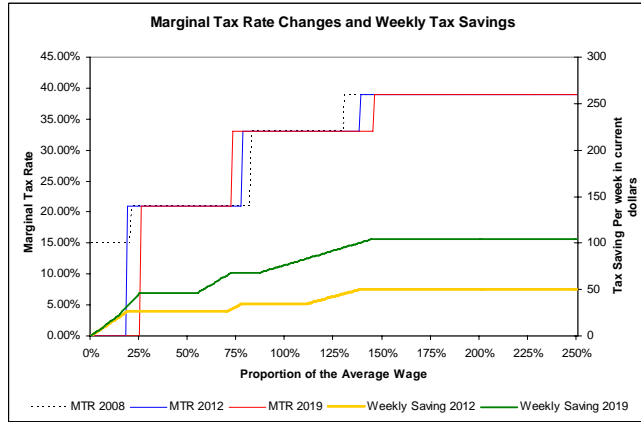


Comparative Analysis – Marginal tax rate changes and weekly tax savings

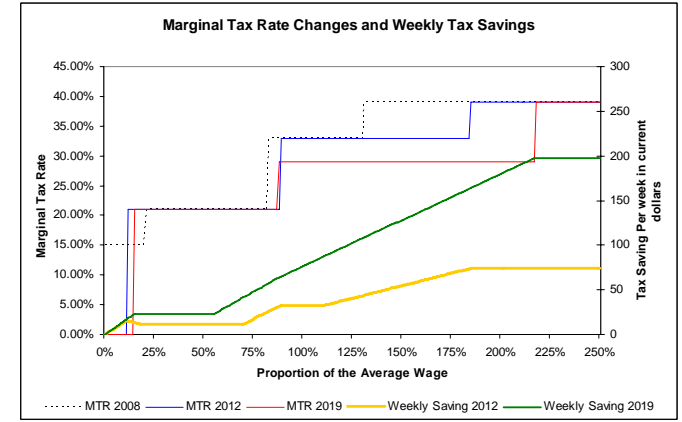
Scenario A – Short run – 10/20/30 scenario



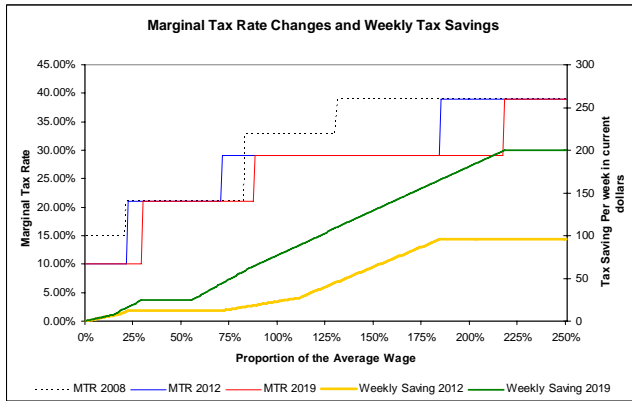
Scenario B – Long run – Free Zone scenario (A)



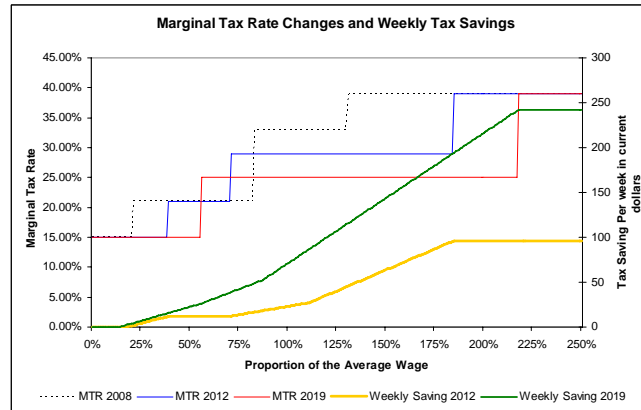
Scenario C – Long Run – Free Zone scenario (B)



Scenario D – Long Run – Low Rate scenario

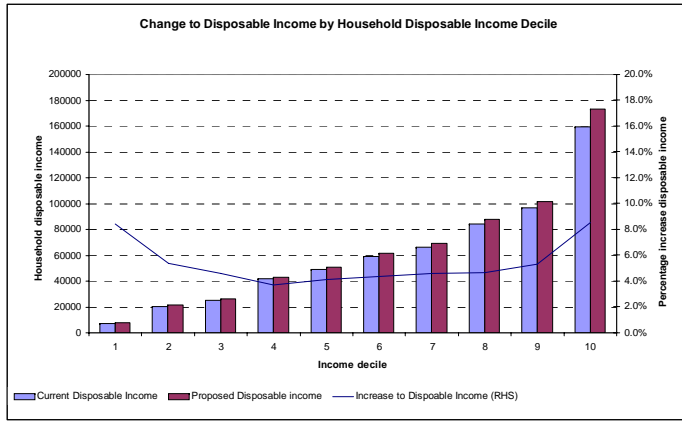


Scenario E – Long Run – 15% Rate scenario

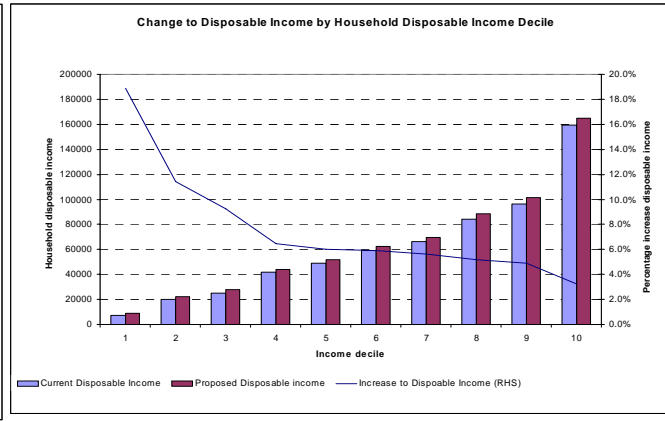


Comparative Analysis – Change to disposable income by household disposable income decile

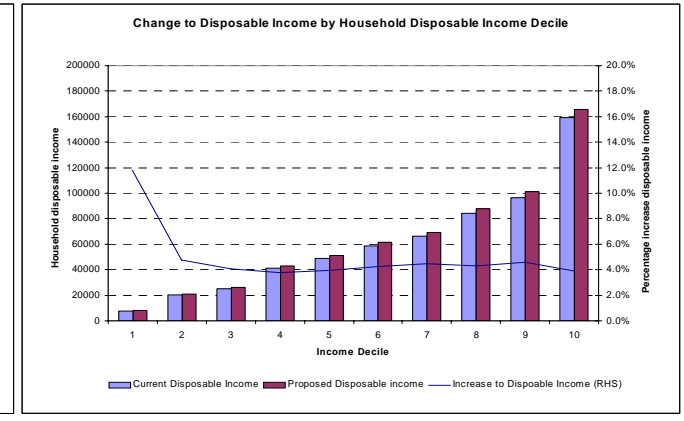
Scenario A – Short run – 10/20/30 scenario



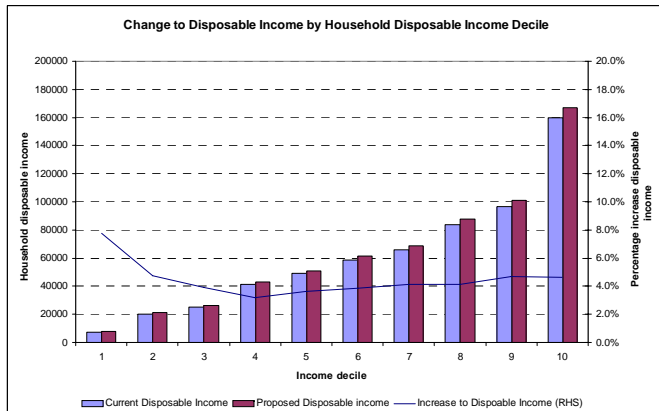
Scenario B – Long run – Free Zone scenario (A)



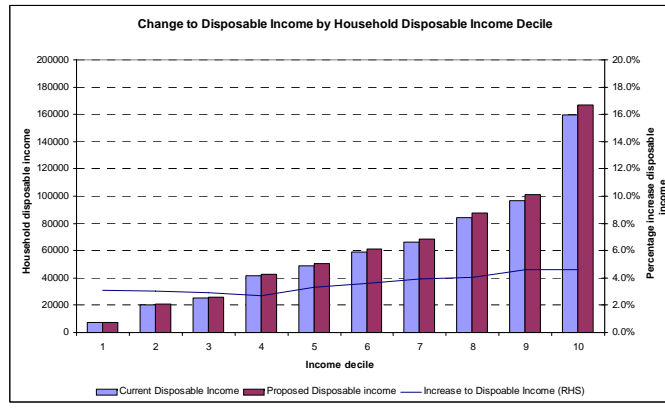
Scenario C – Long Run – Free Zone scenario (B)



Scenario D – Long Run – Low Rate scenario

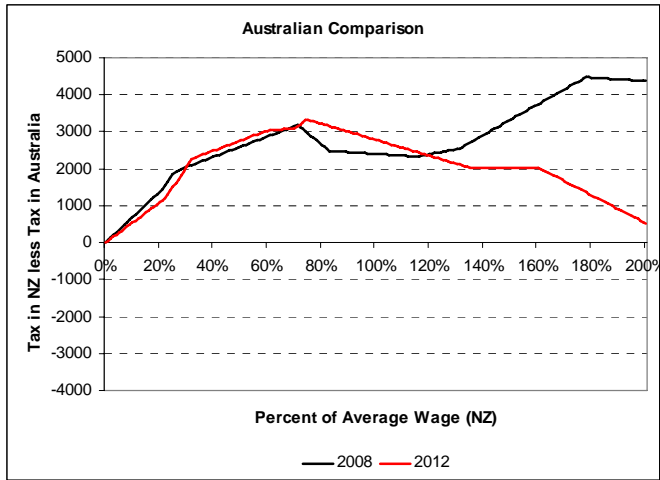


Scenario E – Long Run – 15% Rate scenario

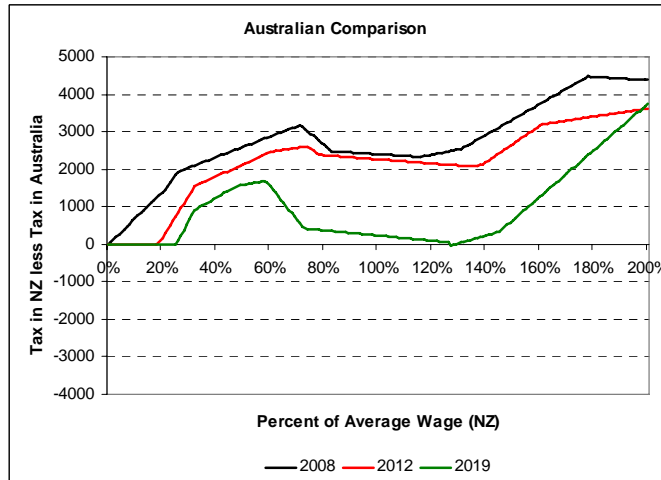


Comparative Analysis – Australian Comparison

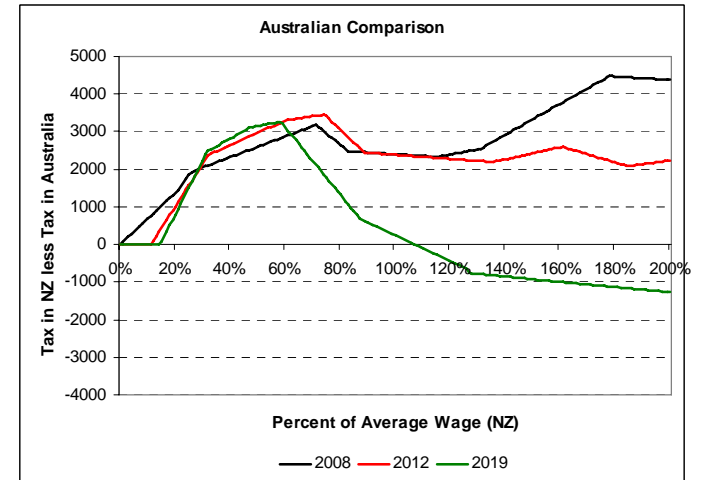
Scenario A – Short run – 10/20/30 scenario



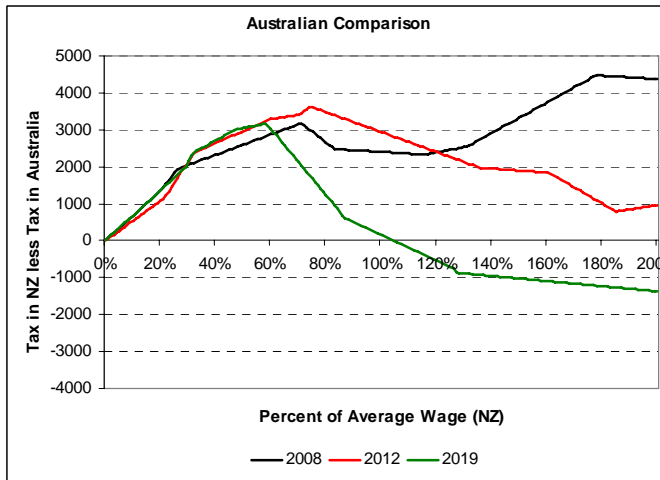
Scenario B – Long run – Free Zone scenario (A)



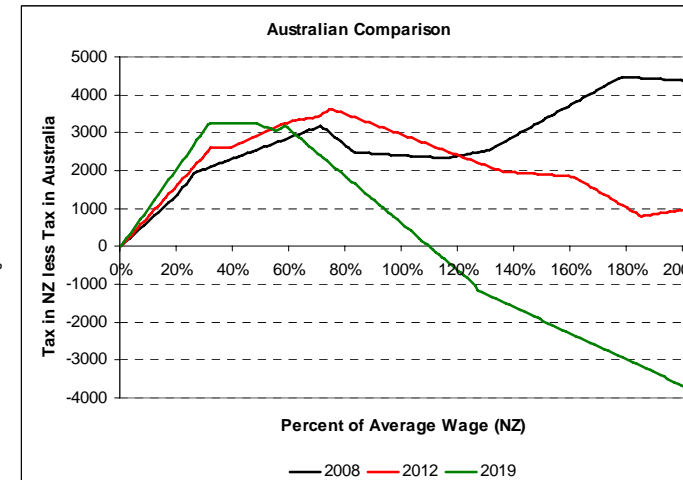
Scenario C – Long Run – Free Zone scenario (B)



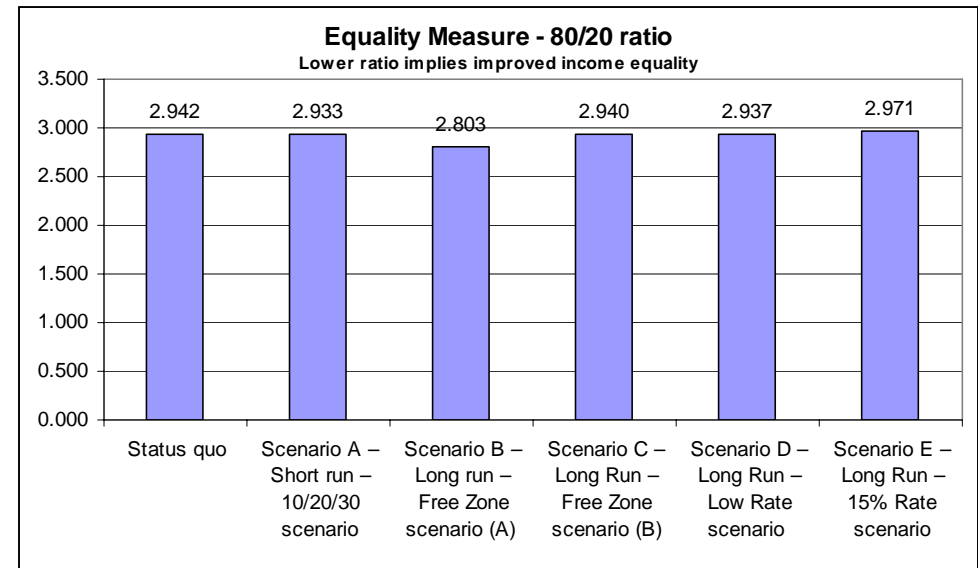
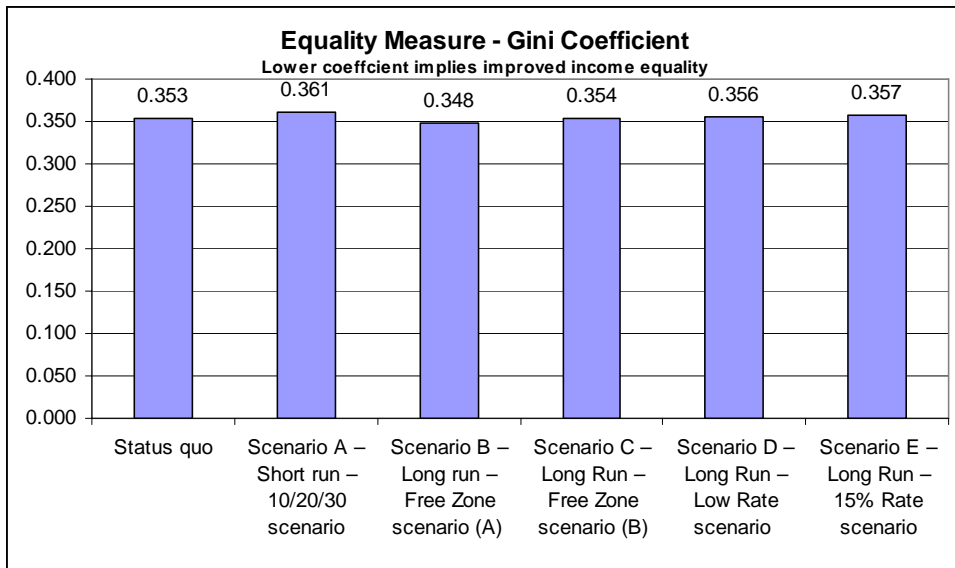
Scenario D – Long Run – Low Rate scenario



Scenario E – Long Run – 15% Rate scenario



Comparative Analysis – Equity Measures



Comparative Analysis – EMTR Analysis

