

Date: 15 November 2007

SH-13-3-0-5

To: Office of the Minister of Finance

From: Tax Strategy, Treasury

Note that the fiscal costs in this aide memoire and the aide memoire on 23 November are incorrect due to a mistake in calculating the New Zealand Superannuation impact. Refer to the document "Treatment of NZ Super in tax change scenarios" for an explanation of the error and for the revised fiscal numbers for the 23 November aide memoire. Revised fiscal numbers for this aide memoire were not produced.

Tax Scenarios

This note provides the revenue cost impact of several tax change scenarios. All modelling assumes a 1 April 2009 start date and the cost is for a full 12 months from this date.

A new standard format for each scenario has been adopted. In moving to this new format, we want to set out clearly the interpretation behind each of the numbers we will provide from now on.

Gross cost – this is the initial loss in revenue as a result of all taxpayers (including NZS recipients and tax on benefits) now paying less tax on their gross taxable income. However under current legislation the change in net income for NZS recipients and beneficiaries may not simply reflect the change in tax. We have made some adjustments to reflect the current legislation:

Spending offsets

NZS impact – Under the New Zealand Superannuation and Retirement Income Act net NZS is calculated by reference to the net ordinary time average wage. Where taxes are changed net NZS would be recalculated. With the current floor of 65%, the value of any tax reduction for a married couple receiving NZS will be equal to 65% of the tax reduction at the ordinary time average wage. Recalculating net NZS could either increase or decrease the gross NZS payments made by MSD, affecting appropriation expenses for Vote Social Development;

Benefit appropriations – Benefits are calculated on a net basis under the Social Security Act. Where taxes are reduced, the net payment to beneficiaries would remain unchanged, but the gross payment made by MSD would fall as would appropriations for Vote Social Development.

Tax offsets

A personal income tax cut package will also raise other taxes when the additional income is spent. Taxpayers will consume a proportion of their tax cut (increase in GST). This will be on some products that attract excise duty (higher excise duties) and the overall consumption will lead to higher company profits (higher company taxes).

This effect is relatively straightforward to estimate and Treasury uses a rate of 17% for this offset. We refer to this as the 'first round' effect.

However, any tax cut will lead to other 'second round' changes in macroeconomic aggregates. For instance, there will be inflationary pressures (compared to the counterfactual of a higher fiscal surplus) leading to higher inflation and/or higher interest rates and higher wages as a result of higher labour demand to meet the higher consumption demand. These effects mean that we can expect higher interest RWT, and higher source deductions etc. In addition there will potentially be some level of labour supply response that will need to be modelled.

Determining the 'second round' effect is a very resource intensive¹ exercise as it requires the Macroeconomic Forecasting team to re-run their whole forecast exercise. Therefore we are unable to do this for every scenario you request. However, as you know the forecasting team has recently modelled the effect of a \$1.5 billion dollar tax package on top of their central HYEPU forecast. We could use this result as a *proxy* for estimating the offset on other scenarios. We would stress however that this will only ever be a rough proxy as (a) it is based on assumptions about how a specific \$1.5 billion tax cut will flow through to the macroeconomy and (b) it will be less relevant when applied to other tax scenarios which are bigger/smaller, and have larger/smaller consumption or any labour supply effects.

Also, as the modelling of the \$1.5 billion tax cut showed, the 'second-round' effect changes over time. In this particular example it increased through time as a smaller interest rate effect had a more immediate impact than the larger inflation impact. The modelling showed that this 'second round' effect grew from 8% of the gross cost net of the spending offsets in 2009/10 to 17% by 2011/12.

Ultimately, Treasury will be able to fully model the desired scenario the Minister wishes to adopt (presumably in the New Year once we are closer to Budget). However in the meantime to estimate the 'second round' effect we will use a proxy of 8% when providing costings on the 2009/10 year. This is in addition to the 'first round' effect of 17%.

On this basis, two further costs are provided for each scenario.

Net cost after 'first round' effects – this reduces the gross cost net of the spending offsets by 17% for the 'first round' effect of increased GST, excise duties and company taxes.

Net cost after 'second round' effects – this reduces the gross cost net of the spending offsets by 17% for the 'first round' effect and a further 8% to approximate the 'second round' effect for the first year.

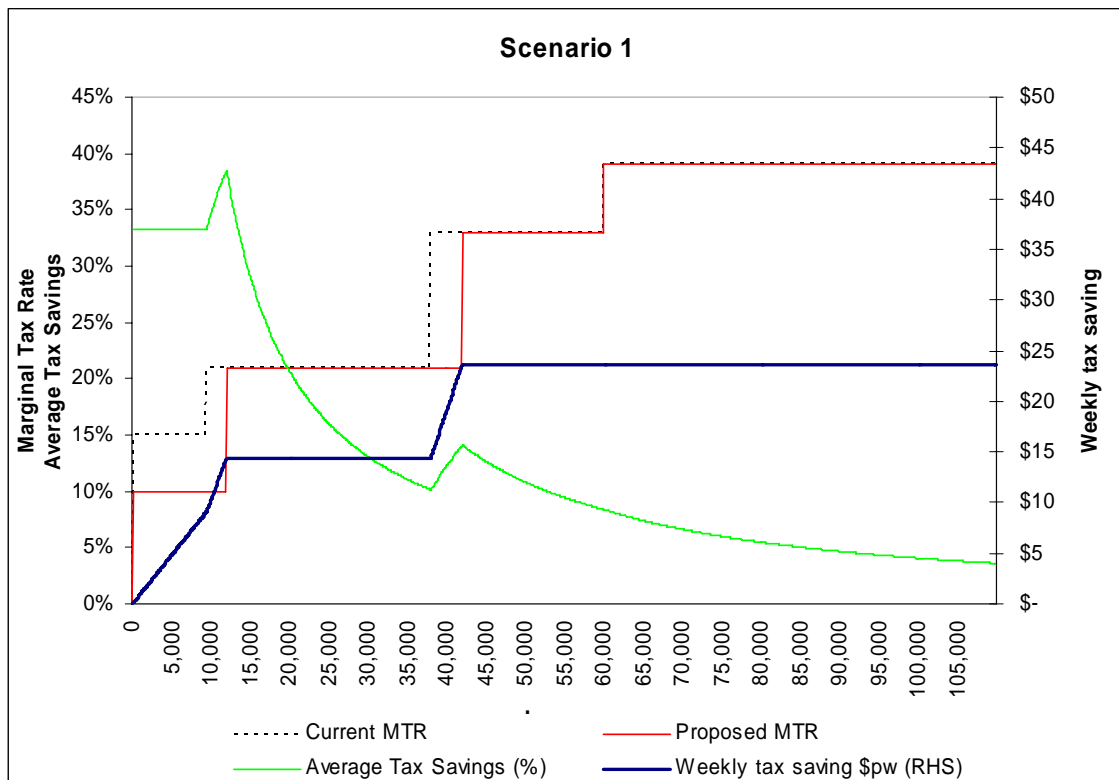
¹ This is because it requires judgements to be made around labour participation, inflation effects and therefore Reserve Bank responses etc.

Scenario 1

Threshold ¹	Rate
0k	10%
12k	21%
42k	33%
60k	39%

1. LIR removed

Fiscal Cost (\$ million)	2009/10
Gross Cost	2675
NZS Impact	-216
Benefit appropriations	-246
<i>Subtotal</i>	<i>2213</i>
Net - 'first round' effect	1837
Net - 'second round' effect	1660

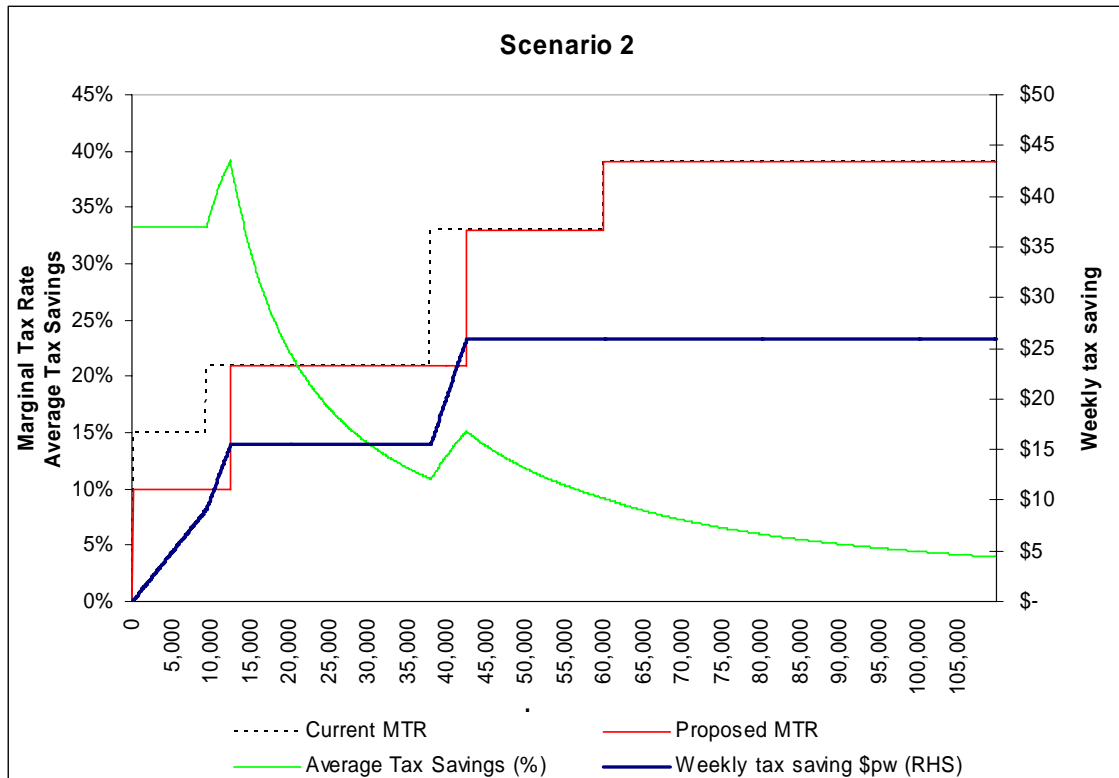


Scenario 2

Threshold ¹	Rate
0k	10%
12.5k	21%
42.5k	33%
60k	39%

1. LIR removed

Fiscal Cost (\$ million)	2009/10
Gross Cost	2878
NZS Impact	-221
Benefit appropriations	-255
Subtotal	2402
Net - 'first round' effect	1994
Net - 'second round' effect	1802

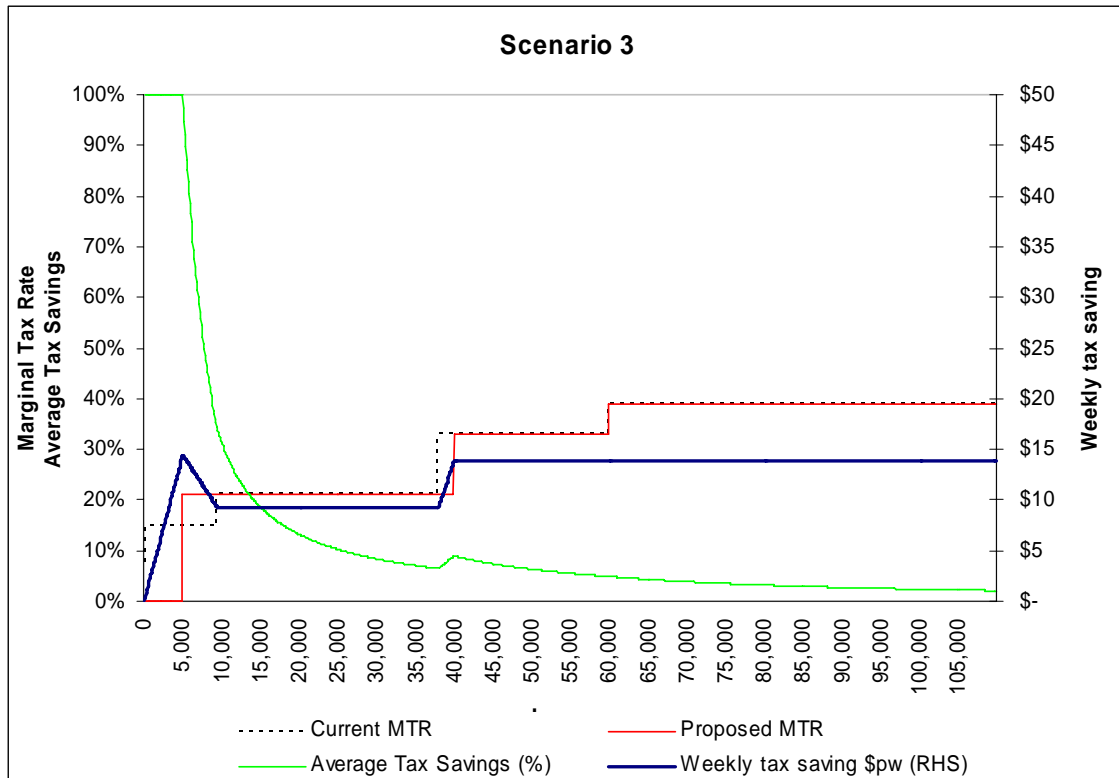


Scenario 3

Threshold ¹	Rate
0k	0%
5k	21%
40k	33%
60k	39%

1. LIR removed

Fiscal Cost (\$ million)	2009/10
Gross Cost	1779
NZS Impact	-173
Benefit appropriations	-209
<i>Subtotal</i>	<i>1397</i>
Net - 'first round' effect	1160
Net - 'second round' effect	1048

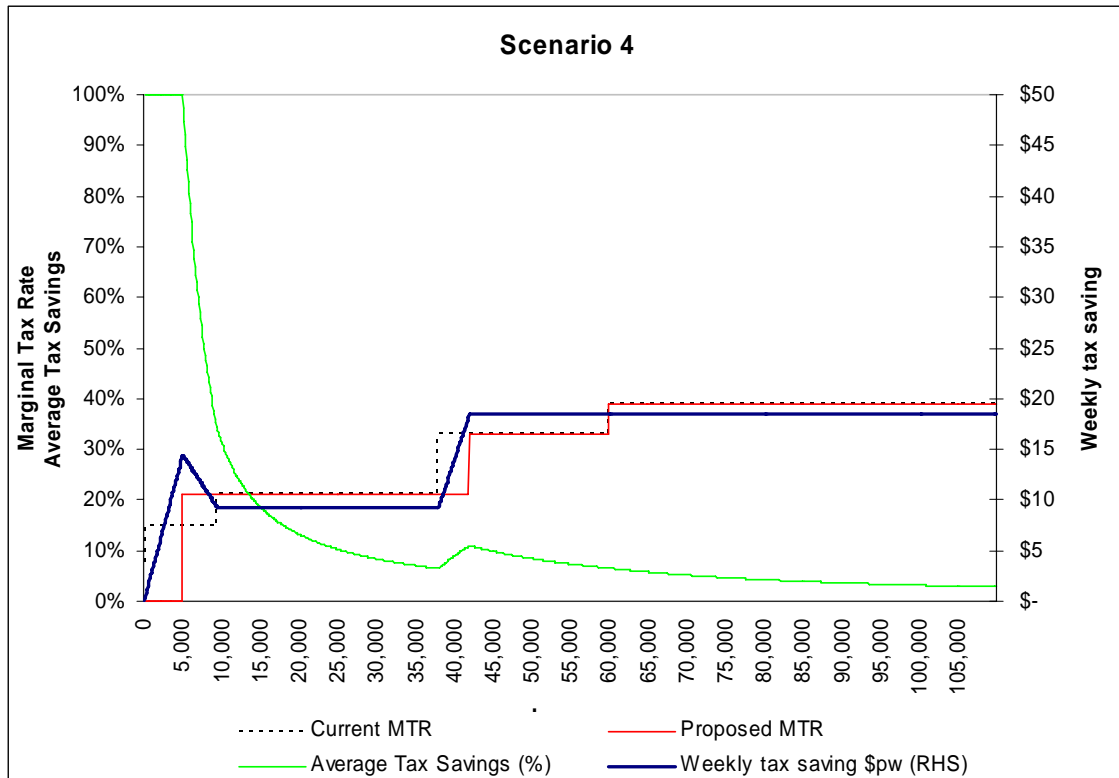


Scenario 4

Threshold ¹	Rate
0k	0%
5k	21%
42k	33%
60k	39%

1. LIR removed

Fiscal Cost (\$ million)	2009/10
Gross Cost	2018
NZS Impact	-111
Benefit appropriations	-208
<i>Subtotal</i>	<i>1699</i>
Net - 'first round' effect	1410
Net - 'second round' effect	1274

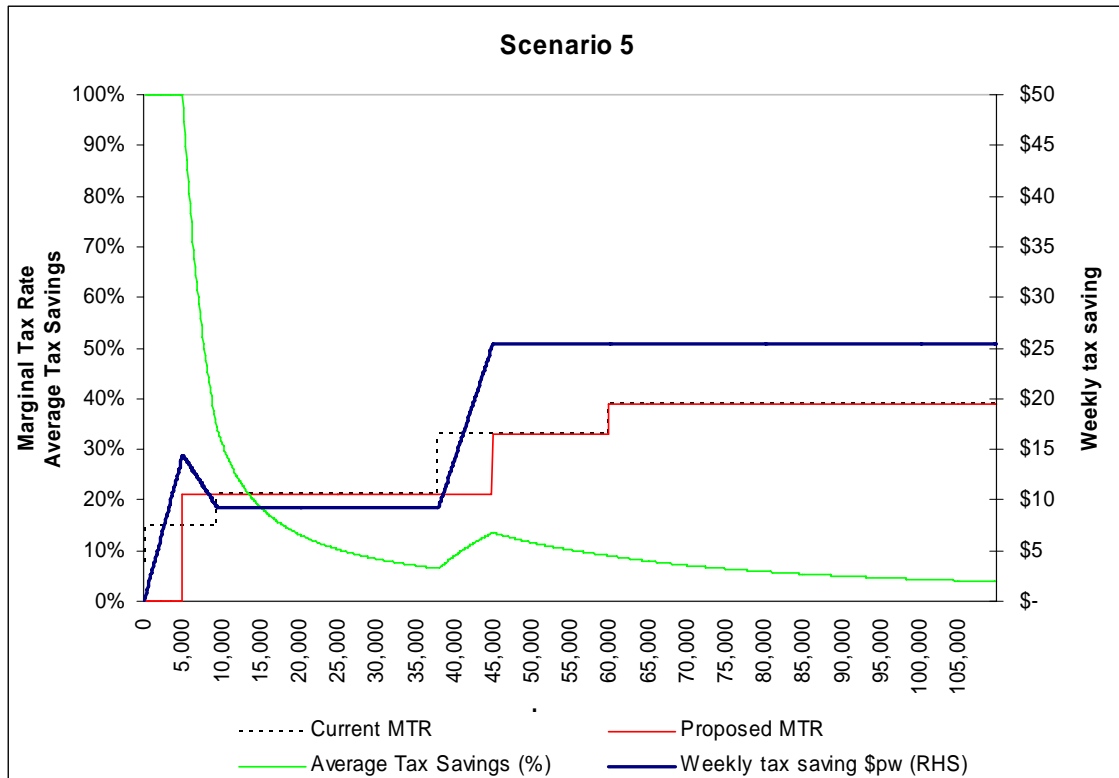


Scenario 5

Threshold ¹	Rate
0k	0%
5k	21%
45k	33%
60k	39%

1. LIR removed

Fiscal Cost (\$ million)	2009/10
Gross Cost	2347
NZS Impact	-21
Benefit appropriations	-208
<i>Subtotal</i>	<i>2118</i>
Net - 'first round' effect	1758
Net - 'second round' effect	1589

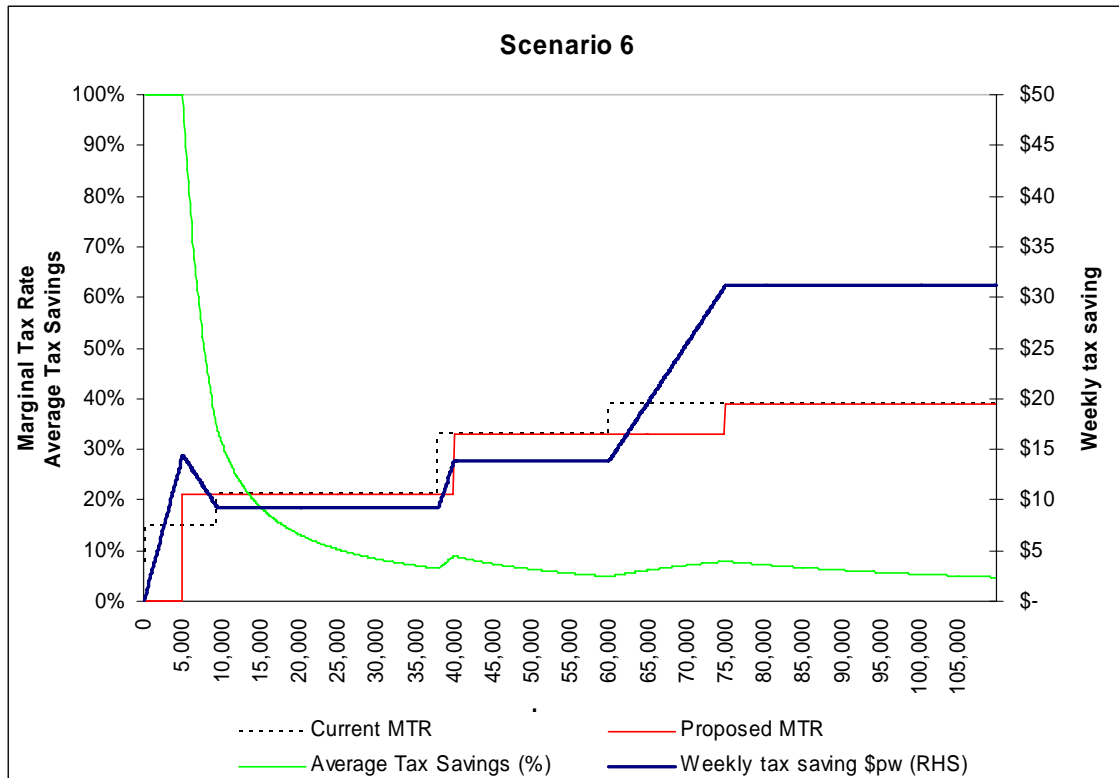


Scenario 6

Threshold ¹	Rate
0k	0%
5k	21%
40k	33%
75k	39%

1. LIR removed

Fiscal Cost (\$ million)	2009/10
Gross Cost	2148
NZS Impact	-172
Benefit appropriations	-209
<i>Subtotal</i>	<i>1767</i>
Net - 'first round' effect	1467
Net - 'second round' effect	1325

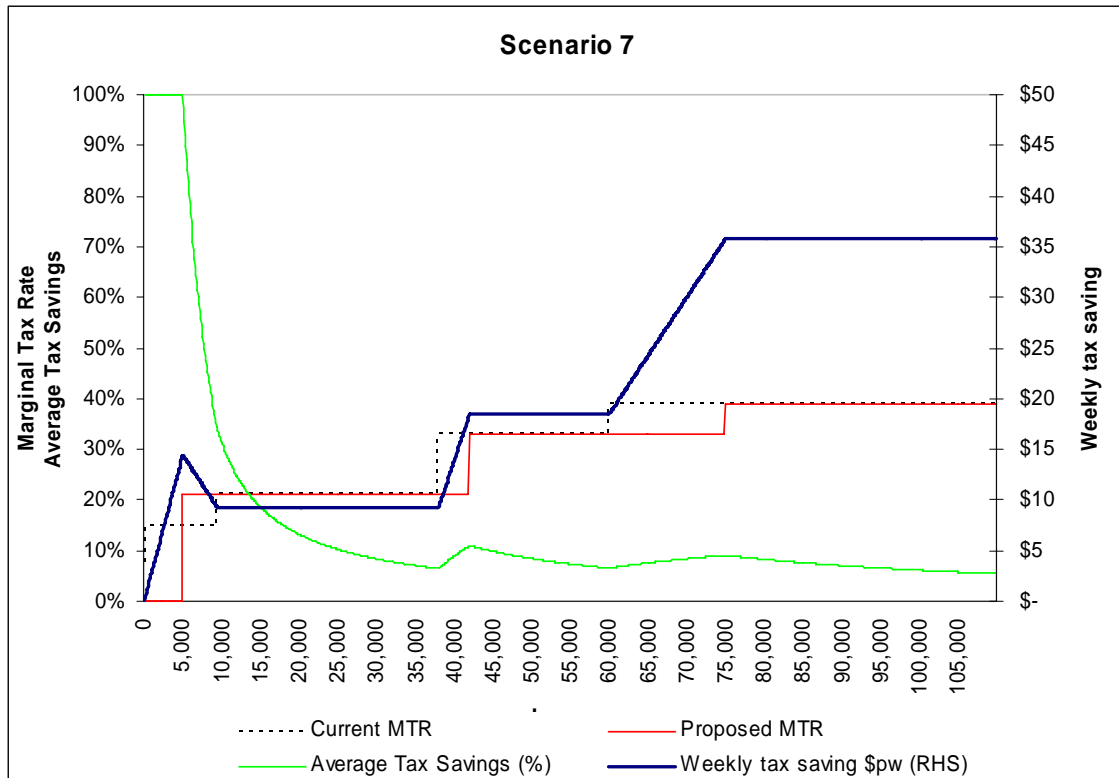


Scenario 7

Threshold ¹	Rate
0k	0%
5k	21%
42k	33%
75k	39%

1. LIR removed

Fiscal Cost (\$ million)	2009/10
Gross Cost	2387
NZS Impact	-111
Benefit appropriations	-208
<i>Subtotal</i>	<i>2068</i>
Net - 'first round' effect	1716
Net - 'second round' effect	1551

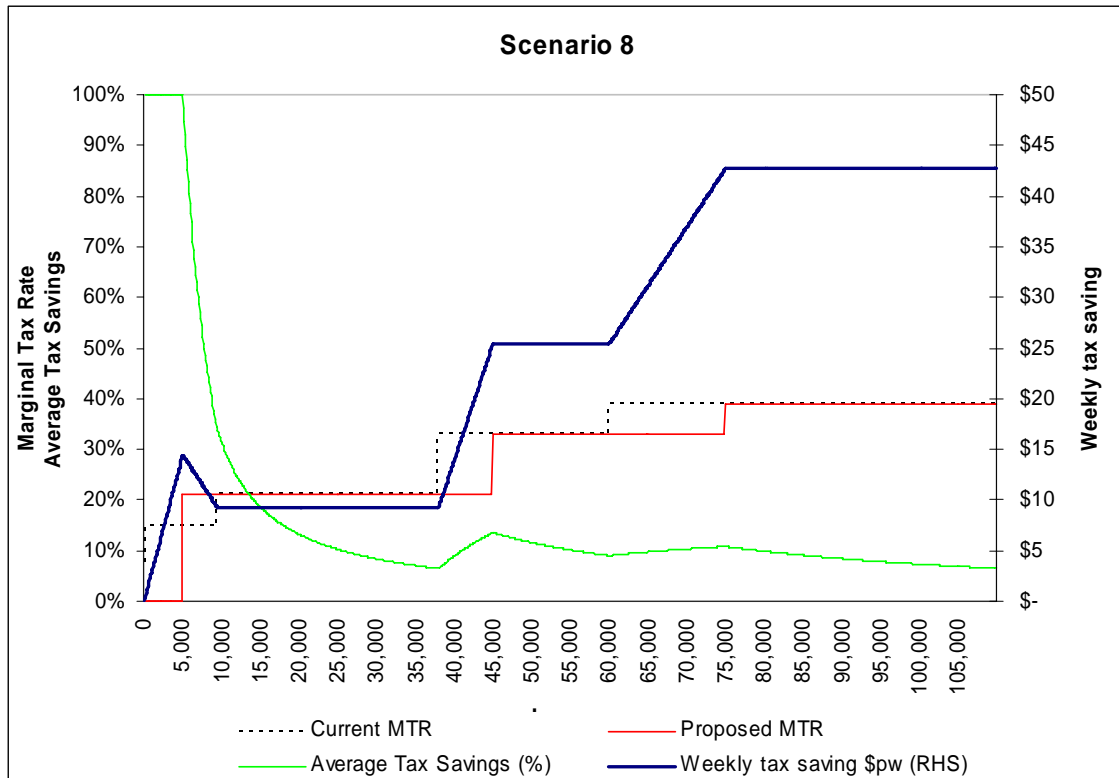


Scenario 8

Threshold ¹	Rate
0k	0%
5k	21%
45k	33%
75k	39%

1. LIR removed

Fiscal Cost (\$ million)	2009/10
Gross Cost	2716
NZS Impact	-20
Benefit appropriations	-208
<i>Subtotal</i>	<i>2488</i>
Net - 'first round' effect	2065
Net - 'second round' effect	1866

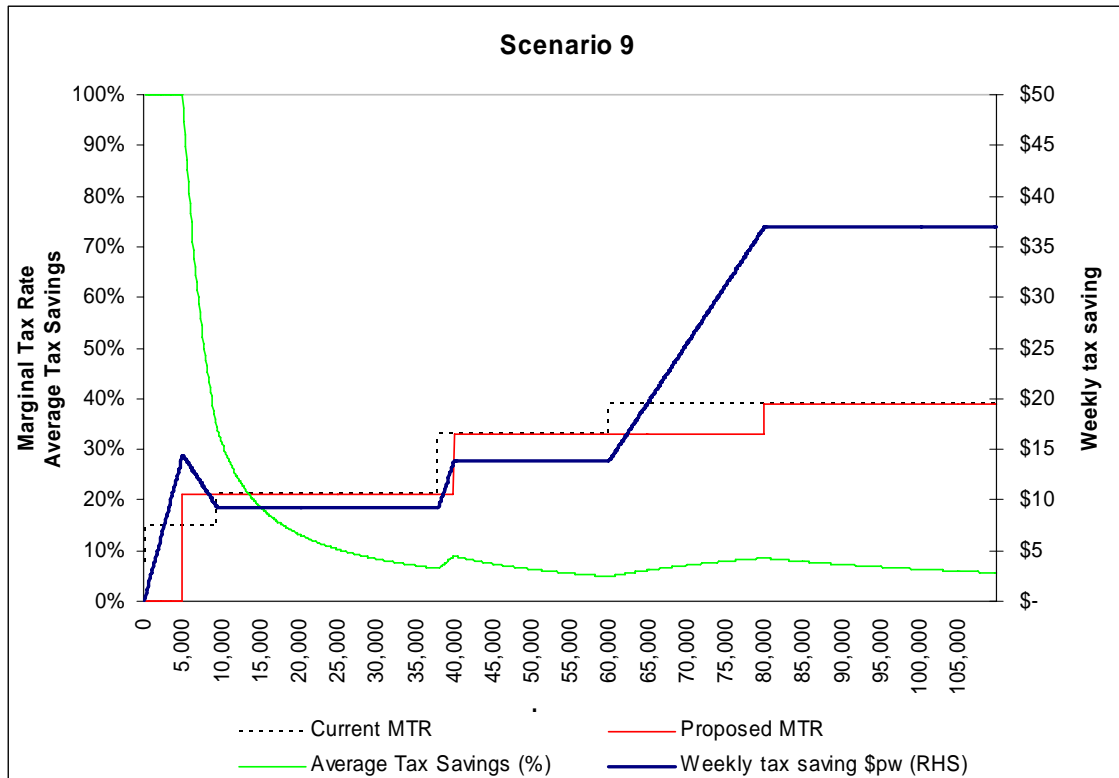


Scenario 9

Threshold ¹	Rate
0k	0%
5k	21%
40k	33%
80k	39%

1. LIR removed

Fiscal Cost (\$ million)	2009/10
Gross Cost	2232
NZS Impact	-172
Benefit appropriations	-209
<i>Subtotal</i>	<i>1851</i>
Net - 'first round' effect	1536
Net - 'second round' effect	1388

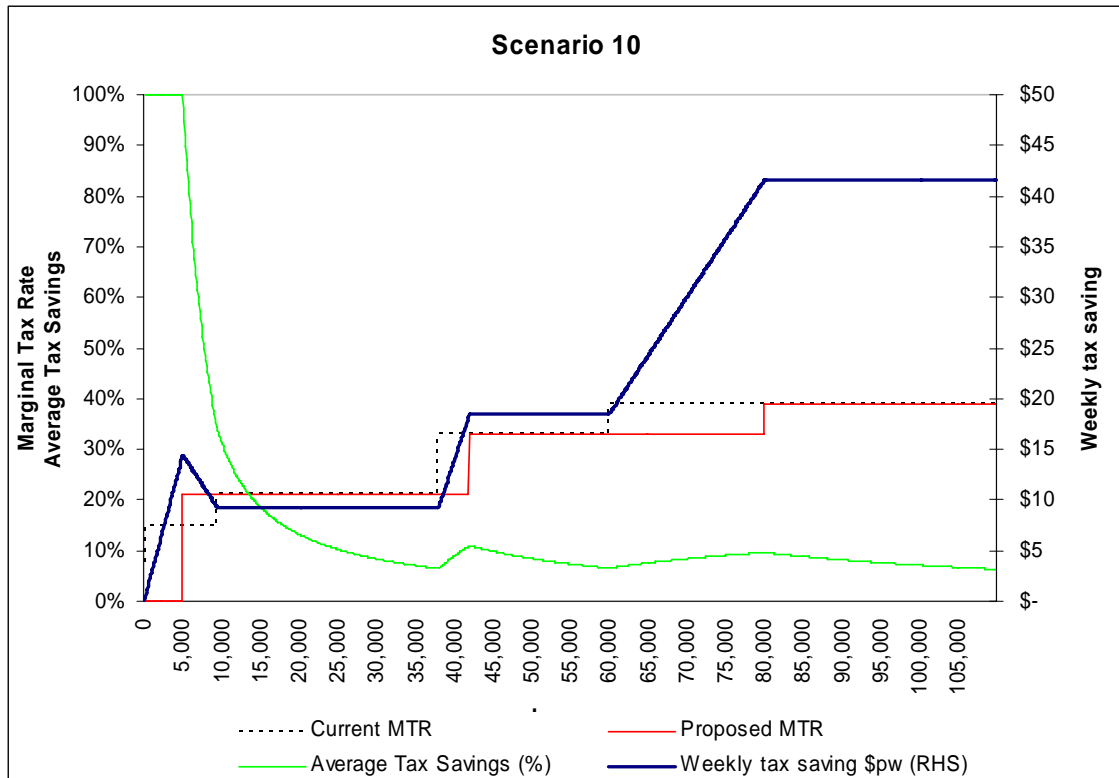


Scenario 10

Threshold ¹	Rate
0k	0%
5k	21%
42k	33%
80k	39%

1. LIR removed

Fiscal Cost (\$ million)	2009/10
Gross Cost	2470
NZS Impact	-111
Benefit appropriations	-208
<i>Subtotal</i>	<i>2151</i>
Net - 'first round' effect	1785
Net - 'second round' effect	1613



Scenario 11

Threshold ¹	Rate
0k	0%
5k	21%
45k	33%
80k	39%

1. LIR removed

Fiscal Cost (\$ million)	2009/10
Gross Cost	2800
NZS Impact	-20
Benefit appropriations	-208
<i>Subtotal</i>	<i>2572</i>
Net - 'first round' effect	2135
Net - 'second round' effect	1929

