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To: Office of the Minister of Finance

From: Tax Strategy, Treasury

AIDE MEMOIRE: PERSONAL TAX CHANGES: READY RECKONER

This note provides the fiscal costs for personal tax changes that involve a tax free zone or low bottom rate with changes to the 33% and 39% thresholds. Scenarios for phasing in personal tax changes over three years are also covered.

First however this note first sets out how superfund contributions are affected by tax changes; this will help with interpreting this ready reckoner.

Summary points

- Revenue costs are higher in future years because of income and population growth (lower tax rates or higher thresholds mean additional revenue is foregone), so the cost of the phased packages are higher than previous indications.
- The reduction to the residual cash position from a \$9 500 free zone with extensions to the 33% and 39% is \$3.9 billion by 2011/12.
- The free zone to \$9 500 has a smaller reduction in the residual cash position in 2011/12 than a 10% rate to \$20 000, but the 10% rate provides \$205 per annum more to taxpayers earning more than \$20 000.
- Changes to superfund contributions can understate the future costs for some options, with future increases in fund contributions for the \$9 500 free zone offsetting the initial cost difference with the 10% rate option.

Changes under consideration

This note provides costs for a first round of personal tax changes using the following two base cases (with low income rebate removed):

- Tax free zone to \$4 000 and 21% to \$42 000 and 33% to \$75 000 and 39% thereafter
- A low bottom rate of 10% to \$8 000 and 21% to \$42 000 and 33% to \$75 000 and 39% thereafter

We provide the change in cost for additional movements in thresholds for this first round and show costs for both 1 October 2008 and 1 April 2009 start dates.

Building on these base cases, we show the cost of implementing a free zone to \$9 500 and a 10% rate to \$20 000 over a further two years.

How the cost is calculated

Changes to the “residual cash position” and “disposable income” are provided in this note. These are calculated as follows:

subtract initial reduction in revenue from tax change
add back savings from lower Social Development appropriations

equals INCREASE IN DISPOSABLE INCOME

add back increased revenue from 25% claw back¹ on increased disposable income

subtract increases to Super Fund Contributions (or *add back* decreases)

subtract increased finance cost from increase in DMO bonds

equals REDUCTION IN RESIDUAL CASH POSITION

All costs have been presented for 30 June fiscal years – not 31 March tax years.

¹ Personal tax reductions lead to higher GST, excise duties and company tax receipts. The Treasury usually applies a claw back rate of 17.1% for these taxes. The higher rate of 25% proxies changes to all other tax types that would arise from a full macroeconomic forecast such as extra taxes from additional economic growth.

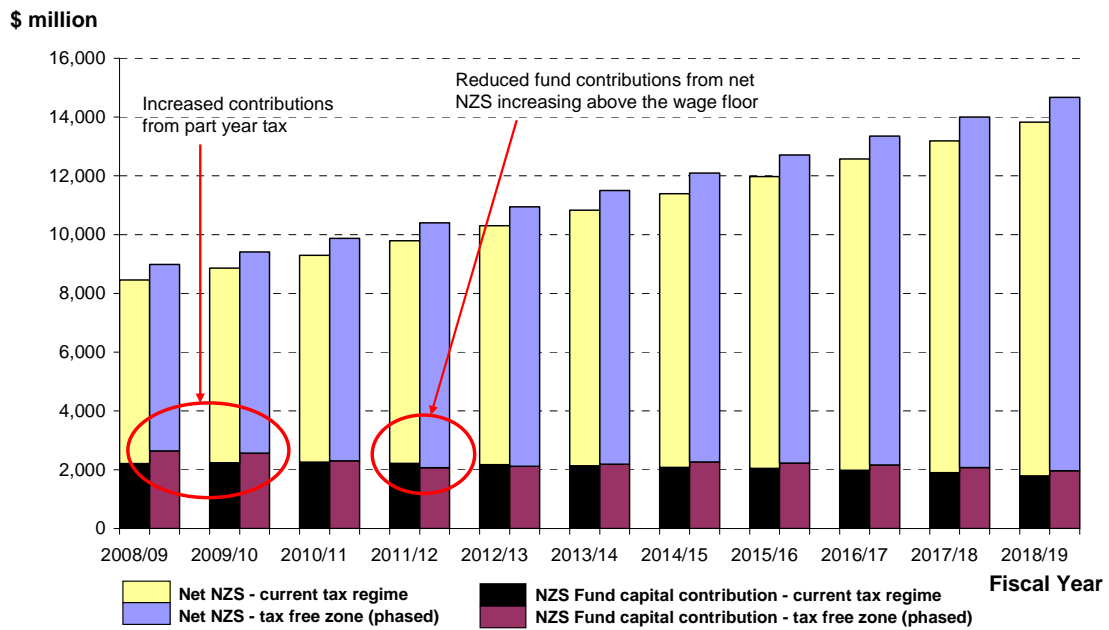
EFFECT OF FUND CONTRIBUTIONS

The cost of New Zealand superannuation is smoothed over a 40 year horizon through setting the *combined annual cost* of net NZ Super and fund contributions/withdrawals as a constant proportion of GDP for each year. Tax reductions that increase net New Zealand super and the wage floor increase the future costs of New Zealand Superannuation and this *combined annual cost* of net NZ Super and fund contributions. There are however three particular differences that arise when considering the current tax change scenarios:

- Changes at the bottom of the tax scale such as a free zone or low rate increase both net NZ super and the wage floor. Both changes increase the future cost of superannuation and increase the *combined annual cost*. Where the tax change increases net NZ Super significantly above the wage floor, the increase to net NZ Super can be large enough that when subtracted from the higher *combined annual cost*, the contribution to the super fund for that year can be less than before the tax change. In this instance the increase in net NZ Super is larger than the increase to the *combined annual cost*.
- A tax change that is introduced mid year increases future cost of NZ Super and also the *combined annual cost* for all years including the year of the tax change. As the tax change affects net NZ Super for only part of a year the increase in *combined annual cost* can well exceed the increase in net NZ Super for that year and contributions to the fund in that same year can increase sharply.
- Where a package is phased over a number of years, the increase to the *combined annual cost* in the first year could be based on either the tax change in that first year only or from the full phased package. If in the first year the *combined annual cost* is increased to reflect the full package this will likely exceed increases in net NZ Super and contributions would be higher (depending on the size of later tax changes the increase in fund contributions could be quite substantial). Alternately, if the increase to the *combined annual cost* is based the tax changes affecting that year only, contributions in the years the package is implemented will be lower (to the extent part year tax changes apply, contributions will still reflect an increase compared to the status quo).

In each case fluctuations in the fund contribution are short term only, and once net NZ Super returns to the wage floor (though CPI adjustments being lower than growth in the net average ordinary time weekly earnings) and the package of changes is implemented, fund contributions return to a new higher “steady state.” Figure 1 shows how composition of the *combined annual cost* changes under the phased \$9 500 free zone scenario:

Figure 1: Net NZS & NZS Fund capital contributions under different tax regimes



A second note that explains changes to fund contributions in further detail and suggests possible alternatives will be provided. For the meantime note that in the short term changes in fund contributions can both over and understate the future costs of some tax changes.

FIRST ROUND OF TAX CHANGES

Costs for a first round of personal tax changes are shown for a base case for each option and for deviations from the two base cases. To interpret these costs note that:

- Costs are provided for the **change in disposable income** (an increase to household disposable income is a cost so is shown as negative figure) and the **reduction to the residual cash position (in bold)**.
- Part year costs are provided for both a 1 October 2008 and 1 April 2009 start date in addition to the first full year cost in 2009/10. All costs are in June years.
- Changes to the middle threshold and at low incomes (free zone and low rate) can affect of the current cost superannuation, with the effects being interdependent. Combinations of free zones and middle rates are shown together. Changes to the 39% threshold do not affect superannuation so can be shown separately.
- For some options shown below net NZ Super increases above the wage floor which causes fund contributions to fall below the status quo and the new steady state. We show for each scenario the future increase in fund contributions to the “steady state” (in most cases occurring from 2011/12).

Free Zone

This base case replaces the low income rebate (“LIR”) with a tax free zone to \$4 000 and extends the 33% and 39% thresholds to \$42 000 and \$75 000. We use \$4 000 as the smallest free zone because removal of the LIR means that smaller free zones would deliver a tax reduction of less than \$5 per week. **In 2009/10 the change in residual cash is \$1.384b.**

Table 1 separates the cost of the base case between the free zone and threshold changes:

Table 1: Cost for threshold changes and free zone

	1 Apr 09	1 Oct 08	2009/10
Thresholds	-228	-651	-933
	-292	-629	-853
Free Zone	-190	-558	-753
	-191	-427	-531

Table 2 shows the full and part year costs for different free zone and middle threshold combinations:

Table 2: Costs for combinations of free zones and middle thresholds

	4000			5000			6000		
	2008/09		2009/10	2008/09		2009/10	2008/09		2009/10
	1-Apr	1-Oct	Full Year	1-Apr	1-Oct	Full Year	1-Apr	1-Oct	Full Year
40000	-354	-1,024	-1,422	-490	-1,418	-1,966	-623	-1,808	-2,503
	-374	-852	-1,118	-554	-1,194	-1,533	-700	-1,500	-1,907
42000	-418	-1,209	-1,686	-553	-1,603	-2,225	-687	-1,992	-2,762
	-483	-1,056	-1,384	-621	-1,358	-1,757	-806	-1,701	-2,170
44000	-478	-1,382	-1,942	-614	-1,776	-2,469	-747	-2,166	-3,006
	-589	-1,252	-1,636	-722	-1,548	-2,006	-905	-1,889	-2,417

For most scenarios in table 2, fund contributions in 2009/10 are below the steady state. Table 3 shows the additional future cost from contributions increasing to their steady state, which in most cases would be in 2011/12.

Table 3: Future increases in fund contributions for free zone options

	4000	5000	6000
40000	-58	-111	-191 (2012/13)
42000	-20	-100	-151 (2012/13)
44000	5	-64	-116

Low Bottom Rate

The base case replaces the LIR with a 10% rate on income to \$8 000 and extends the 33% and 39% thresholds to \$42 000 and \$75 000. **In 2009/10 the change in residual cash is \$1.423 billion.** This cost can be broken down to that arising from threshold changes and from introducing the low bottom rate:

Table 4: Cost for threshold changes and low rate option

	1 Apr 09	1 Oct 08	2009/10
Thresholds	-228	-651	-929
	-277	-615	-839
Low rate	-206	-604	-817
	-223	-475	-585

Table 5 shows the full and part year costs for different combinations of low and middle rate thresholds:

Table 5: Costs for combinations for low and middle rate thresholds

	8000			9500			11000		
	2008/09		2009/10	2008/09		2009/10	2008/09		2009/10
	1-Apr	1-Oct	Full Year	1-Apr	1-Oct	Full Year	1-Apr	1-Oct	Full Year
40000	-370 -392	-1,070 -885	-1,486 -1,158	-474 -539	-1,371 -1,156	-1,903 -1,483	-575 -655	-1,668 -1,391	-2,312 -1,770
42000	-434 -500	-1,255 -1,090	-1,746 -1,423	-538 -606	-1,556 -1,318	-2,161 -1,705	-639 -760	-1,852 -1,593	-2,570 -2,033
44000	-494 -606	-1,428 -1,286	-2,001 -1,675	-598 -710	-1,729 -1,511	-2,405 -1,958	-699 -839	-2,025 -1,762	-2,814 -2,260

As for the free zone, fund contributions in 2009/10 for most of the low rate options in table 5 are below the steady state. Table 6 shows the additional future cost from contributions increasing to their steady state, which in most cases would be in 2011/12:

Table 6: Future increases in fund contributions for low rate options

	4000	5000	6000
40000	-73	-110	-170 (2012/13)
42000	-35	-100	-131 (2012/13)
44000	-6	-61	-110

Changes to the top threshold

The base case includes an increase in the 39% threshold to \$75 000. The change in cost from deviations from \$75 000 are shown in table 7:

Table 7: Cost of further changes to the 39% threshold

	1-Apr	1-Oct	2009/10
70000	27 21	75 60	110 88
80000	-22 -18	-61 -49	-92 -73
90000	-56 -45	-156 -124	-232 -185
100000	-82 -65	-230 -182	-337 -269

PHASING THE PACKAGE

This section sets out the costs of moving from each base case to a \$9 500 free zone and 10% rate to \$20 000 in Budgets 2009 and 2010. Costs are based on stage one being implemented from 1 October 2008, with stages two and three applying from 1 April 2010 and 2011 (tax years following Budgets 2009 and 2010)

A few points to note in interpreting these costs:

- Previously we have shown the cost of implementing a free zone and 10% low rate in a single year – 2009/10. Income and population growth mean that the static cost of tax changes increases in future years. This is reflected in the four year cost profile provided. Each phased package applies for the full 2011/12 year.
- The free zone option increases net NZ Super well above the wage floor which reduces fund contributions below the status quo in 2011/12 and 2012/13. Contributions increase to a “steady state” again from 2014/15.
- To calculate fund contributions for 2008/09 and 2009/10 we have taken account of the full phased package’s impact on the *combined annual cost* of superannuation. As a result fund contributions and the change in residual cash in these years are larger than in the first round changes shown in the previous section.

Free Zone

The phased implementation of a free zone to \$9 500 has been modelled as follows:

- Stage 1: The LIR is replaced with a \$4 000 free zone and the 33% and 39% thresholds are increased to \$42 000 and \$75 000. These changes apply from 1 October 2008
- Stage 2: increases free zone to \$6 750 from 1 April 2010
- Stage 3: increases free zone to \$9 500 from 1 April 2011

The phased free zone package has the following four year cost profile (fiscal years to 30 June):

Table 8: Cost profile for phased implementation of free zone to \$9 500

	2008/09	2009/10	2010/11	2011/12
Change in disposable income	-1,209	-2,050	-3,566	-5,115
Change in residual cash	-1,420	-1,972	-2,885	-3,911

The steady state fund contribution in 2014/15 is \$329m higher than the contribution in 2011/12. Because in 2011/12 net NZ super exceeds the wage floor contributions are \$146m below the status quo.

Low bottom rate

The phased implementation of a 10% rate to \$20 000 has been modelled as follows:

- Stage 1: The LIR is replaced with a 10% rate to \$8 000, and the 33% and 39% thresholds are increased to \$42 000 and \$75 000. Changes apply from 1 October 2008
- Stage 2: increases the 10% threshold to \$14 000 from 1 April 2010
- Stage 3: increases the 10% threshold to \$20 000 from 1 April 2011

The phased low rate package has the following four year cost profile (fiscal years to 30 June):

Table 9: Costs for phased implementation of a 10% rate to \$20 000

	2008/09	2009/10	2010/11	2011/12
Change in disposable income	-1,255	-2,152	-3,737	-5,098
Change in residual cash	-1,469	-2,044	-3,058	-4,182

In 2011/12 fund contributions are \$122m higher than the status quo, the contribution increases to \$181m above the status quo in 2014/15

In 2011/12 the reduction to residual cash is \$271m lower for the free zone option. However future increases to fund contributions to reach the steady state are \$270m higher for the free zone. This means that by 2014/15 there is likely to be little difference between the changes in residual cash for these two options.

OTHER COMMENTS

Our simulation models use March 31 tax years, so we have had to adjust these figures to provide costs for 30 June fiscal years. We have calculated fiscal years by taking the last three quarters of one tax year and the first quarter of the following tax year. This works well for PAYE which represents around 85% of affected revenue but not as well for the remaining 15% from other persons or RWT. Decisions taken around treatment of RWT, SSCWT, provisional tax and PIE's could therefore change the amount of tax reduction recognised in the 2008/09 year. There would be a much smaller impact in later years as tax costs shifted from 2008/09 to 2009/10 would be mostly offset by a corresponding shift from 2009/10 to 2010/11.