To: Office of the Minister of Finance

From: Tax Strategy, Treasury

Date: 8 April 2008

STOCK TAKE OF DISTRIBUTIONAL ANALYSIS FOR PERSONAL TAX CHANGES

This note summarises recent information provided to you regarding low income individuals and households. It outlines the extent to which low individual taxable income is a good proxy for economic wellbeing and where tax policy can be a good redistributive instrument.

A person with low taxable income does not necessarily have low economic wellbeing, and tax changes may have a limited effect on disposable incomes

Our analysis suggests that individuals reporting low taxable income fall within one of the following four categories:

1. *Disposable income may not be affected by tax cuts or may be insensitive to specific design in the medium term (as net income is determined by a legislative formula)*

2. *Low taxable income is not a good indicator of economic wellbeing, as low income individuals may benefit from the income of others or taxable income might be quite different from actual economic or disposable income*

3. *Low taxable income may be temporary only*

4. *Low taxable income does reflect economic wellbeing*

Tax might be a good instrument for redistribution for those falling in category 4 only. However our analysis of low income individuals and household incomes suggests only a small proportion of individuals fall within this category.

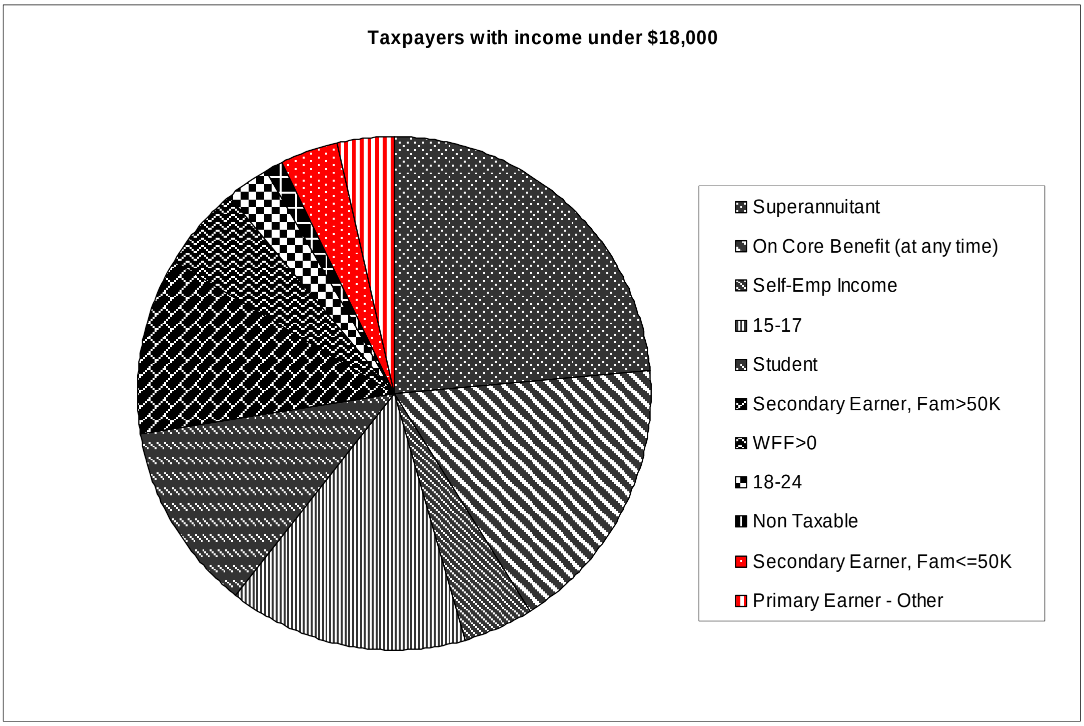
Our earlier analysis used data from the 2003/04 Household Economic Survey. Data from the 2006/07 survey has recently become available and we have replicated our earlier analysis. Analysis from the two surveys is comparable except that the 2006/07 Survey has a larger number of individuals reporting zero taxable income. As tax changes cannot affect the disposable income for those with zero taxable income our earlier results remain valid (there may be indirect effects through improved incentives to earn taxable income however). For comparison we have included results from both surveys where relevant.

ANALYSIS OF INDIVIDUALS

Only a small proportion of people with low taxable income will have low economic wellbeing

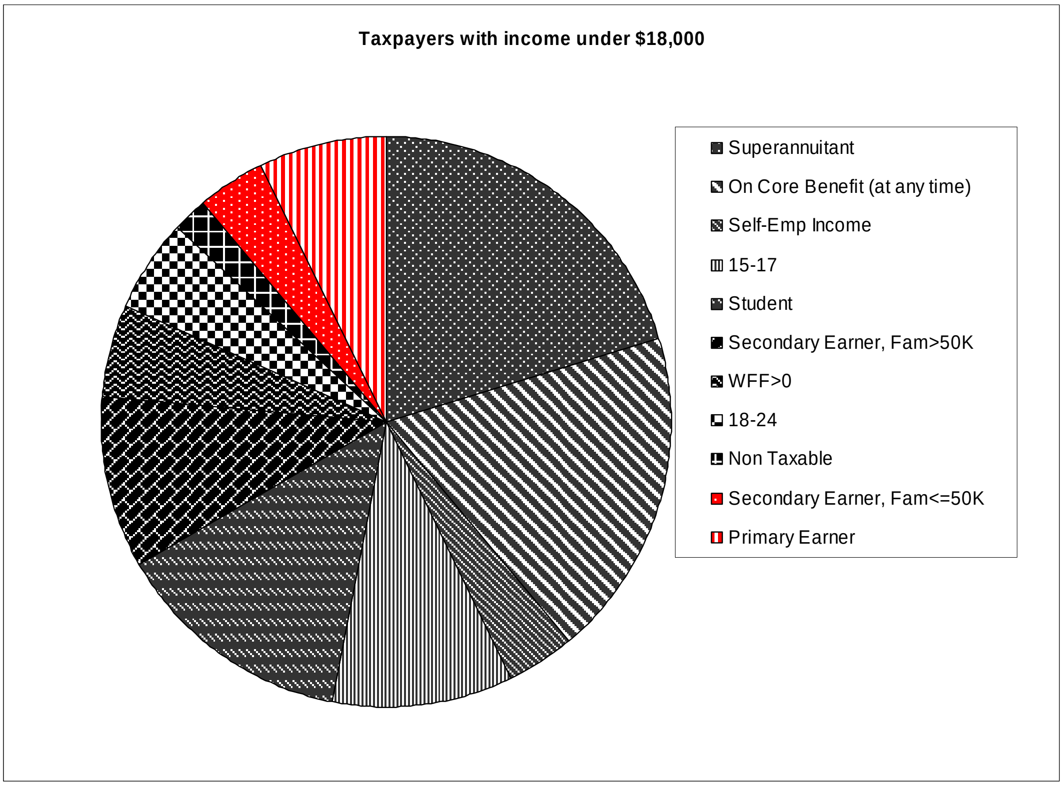
We have focused our analysis on the 1.4 million individuals with taxable income below $18,000; this is below the income of someone working 30 hours per week at the minimum wage ($18,720 per annum). Up to 90% could be characterised as those with temporary low taxable income (18-24 year olds and students), those relying on other economic or disposable income (self-employed, recipients of working for families, many secondary earners and 15-17 year olds) and those who get support through the benefit system and are less affected by tax design (super annuitants and beneficiaries). Figure 1 splits these low income individuals into one of 11 mutually exclusive groups; only those in the last two groups (shown in red in figure 1) are most likely to have low economic wellbeing as a result of low taxable income.

Figure 1a: Composition of individuals on incomes below $18,000 per annum (HES 2003/04)



Source: Treasury, Household Economic Survey 2003/04

Figure 1b: Composition of individuals on incomes below $18,000 per annum (HES 2006/07)



Source: Treasury, Household Economic Survey 2006/07

The 11 groups, and reasons why low taxable income might not reflect low economic wellbeing, or why tax may be a poor redistributive instrument, are outlined below.

1. *NZ Super is the majority source of income*: While tax cuts at the level of NZ Super would increase disposable income in the short term, in the medium term (between 1-3 years) tax changes at the average wage have the greatest impact on net NZ Super as a result of the legislative formula that sets the net NZ Super at between 65-72.5% of the net ordinary time average weekly earnings and annual CPI adjustments. (**Category 1**)

2. *Core benefit is the major source of income*: Benefits are set as a net rate in legislation. This means that where tax changes reduce the tax paid on benefit income, gross payments are reduced by an amount equivalent to the tax change leaving the net rate unchanged. Therefore tax changes have no effect on disposable income for those receiving benefit income alone (**Category 1**)

3. *Self employment is the major source of income*: while reported taxable income from self employment might be low, economic income could in many cases be much higher (due to business profits being retained within a company or losses being used to offset personal income etc). This may not apply in all cases and low taxable income may reflect low economic wellbeing for some self employed; for some this will be persistent. Indeed Inland Revenue data suggests that 40% of taxpayers earning less than $18,000 with self-employment as their main source of income in 2001

earned more than $18,000 in 2006. (**Most Category 2 and some <u>Category 4</u>**)

4. *Aged 15*-17: The Treasury's TaxWell micro-simulation model shows that almost all have income below $10,000. Economic wellbeing for most 15-17 year olds would be dependent on their parents' income. (**Most Category 2**)

5. *Students*: Students are most likely to have temporary low income as they forego market income while engaged in study. Other policy instruments could be better targeted to increasing student income such as increasing levels of student allowance and changes to student loan policy. (**Most Category 3 and possibly Category 2**)

6. *Secondary earner in a family with taxable income greater than $50,000*: Although family income of $50,000 might not be considered high, a low income secondary earner from such a family would not face low household income and would not have low economic wellbeing. (**Category 2**)

7. *Family is entitled to receive working for families tax credits:* families with low taxable income receiving working for families may pay little or negative amounts of tax. This means disposable income, once working for families is taken into account, can exceed taxable income. Although disposable income may still be low there are other policy levers that might be better targeted at increasing incomes. (**Category 2**)

8. *Individual is aged 18-24:* low taxable income might be temporary for many of these individuals, reflecting recent entry into the workforce (i.e. part way through a year) and higher income may be expected in the future with greater experience. (Note 30 hours per week at the minimum wage would provide annual income of $18,720). For some however low incomes will not be temporary and may reflect low economic wellbeing. (**Most Category 3, some <u>Category 4</u>**)

9. *Majority of income is from non-taxable sources:* while taxable income is low, a greater amount of income is derived from non-taxable sources. Total income may still be low, but it still exceeds taxable income. [1] (**Most Category 2 some <u>Category 4</u>**)

10. *Secondary earner in a family with taxable income less than $50,000:* there is a much greater possibility that individuals in this group would be members of low income households and have low economic wellbeing. Individuals in this group do not have children (as are not eligible for WFF) and given their taxable income level would be unlikely to be in full time work. (**Most <u>Category 4</u> but some within Category 3**)

11. *Primary earner:* this group is most likely to face low household income and economic wellbeing. For these individuals a majority of income comes from sources other than benefit, NZ Super and self employment, and are not

[1] The Household Economic Survey records a number of income types that we cannot distinguish and therefore cannot treat as taxable income, examples include irregular income and some overseas pensions. It might be the case that such income is taxed, but we cannot identify this from the survey data.

members of a higher income household. Almost all individuals in this group with income below $10,000 did not work full time (30 hours per week) for at least 6 months of the year and many did not work at all. Inland Revenue data suggests that around 50% of taxpayers that earned less than $10,000 and worked full time for less than half the year in 2001 earned more than $18,000 in 2006; this suggests low taxable income may not be persistent for a number of individuals in this group. (**Most <u>Category 4</u> but some within Category 3**)

Up to 164,000[2] individuals with low taxable income might have low economic wellbeing…

This figure most likely represents an upper bound, since we know that for some of these individuals low economic well-being is not persistent – for example, individuals who entered the workforce part way through the year would have low income for the survey period although they might be in full time work, and individuals might be temporarily out of the work force during the survey period (indeed a large proportion of individuals in category 11 worked for only a small part of the year). Some individuals within other categories, such as some self employed and 18-24 year olds may also face persistently low economic wellbeing. Broadly however, based on the classifications identified above (attributing each group to the category most individuals would fall into), the number of individuals in each category are shown in table 1:

Table 1: Approximate breakdown of low income individuals

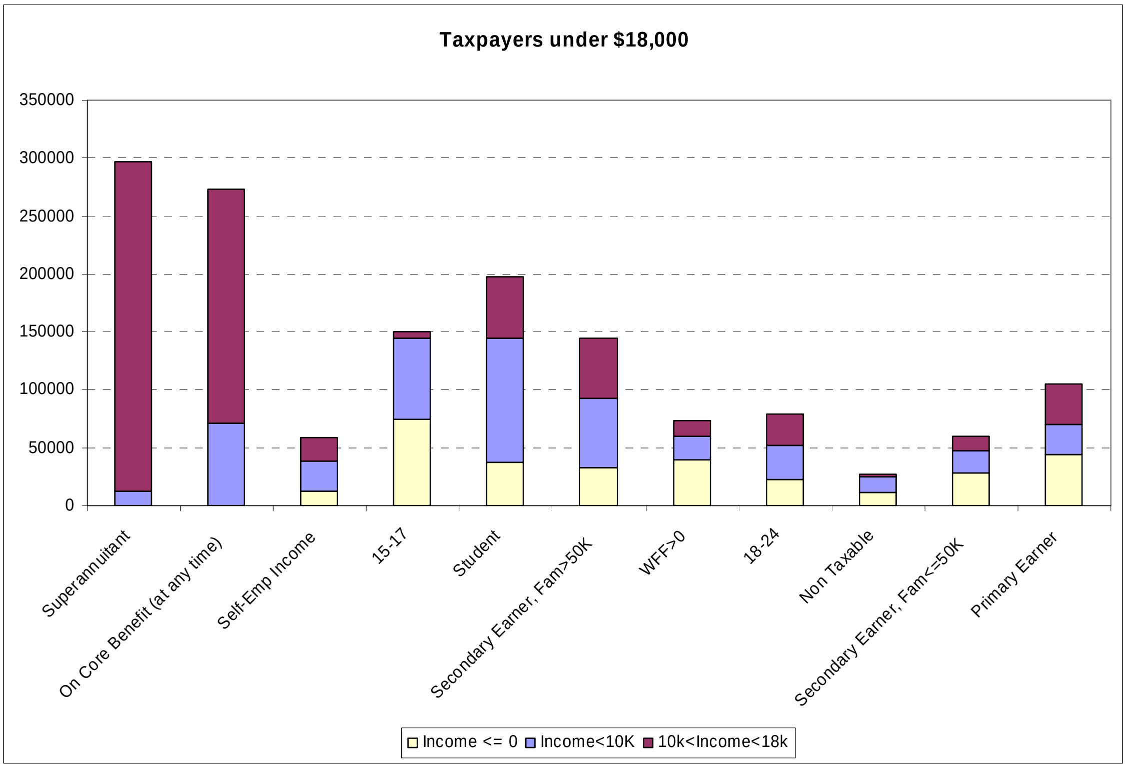
	Proportion of low income taxpayers
Category 1: Disposable income not affected or insensitive to specific design	39-41%
Category 2: Low taxable income is temporary only	15-19%
Category 3: Low taxable income not good proxy for economic well being	31-37%
Category 4: Low taxable income does reflect economic wellbeing and may be persistent	**7-11%**

…but significant proportion of those individuals report zero taxable income

Figure 2 shows the relative number (within each group) reporting $0, up to $10,000 and between $10,000 and $18,000 of taxable income. As noted above the 2006/07 Household Economic Survey data shows a larger number of individuals reporting zero taxable income. For these individuals, tax changes are unlikely to directly affect disposable income; although tax changes could affect incentives to earn taxable income. Removing those with zero taxable income means that up to 95,000 of individuals might have low economic wellbeing and can be affected by tax changes.

[2] Results for the 2006/07 Household Economic Survey figures reported. 2003/04 survey data suggests this figure is closer to 100,000.

Figure 2a: Taxable income levels of low income individuals (2006/07 HES)



Source: Treasury, Household Economic Survey 2006/07

ANALYSIS OF HOUSEHOLDS

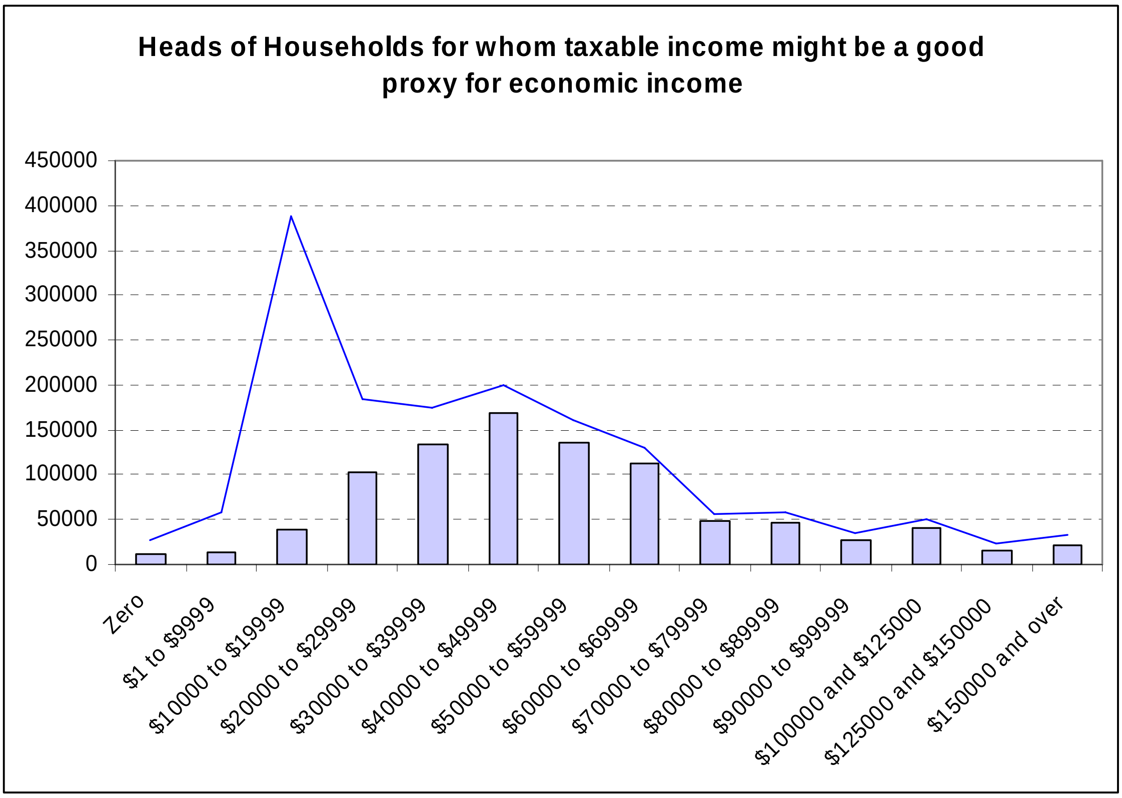
It is important to consider how tax changes affect household disposable incomes…

As was the case for individuals, for some households low taxable income may not reflect low economic wellbeing and tax may be a poorly targeted redistributive instrument. Accordingly we have similarly decomposed households by looking at the income of the highest income earner, or head, for each household. We have also separated those heads of households that earn a majority of their taxable income from NZ Super, a Core Benefit or from self employment income. Heads of households that are under 23 or receive student allowances are also removed, as are those household heads that receive non-taxable income as their major source of income.

…very few heads of households have low taxable income from wage and salary income only

The chart below shows that about 60,000 remaining heads of households have incomes below $20,000 (the blue line indicates the total number of heads of households at different incomes).

Figure 3: Heads of Household for whom taxable income might be good proxy for economic well-being



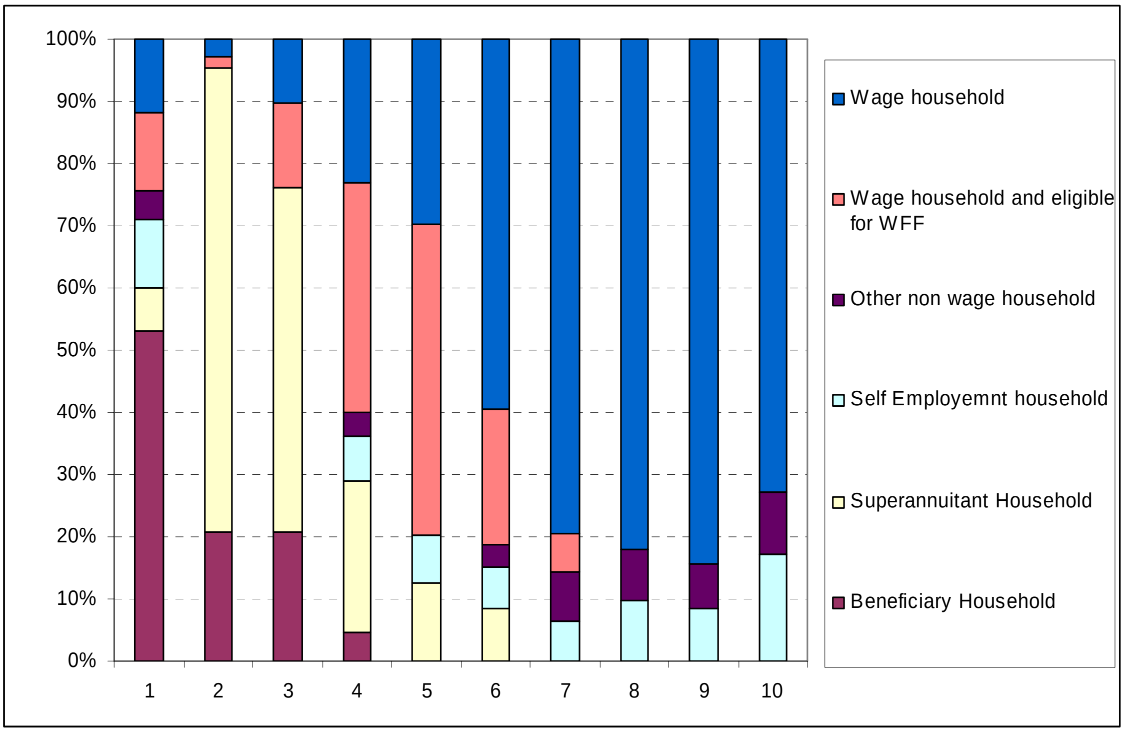
Source: Treasury, Household Economic Survey 2006/07

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, pensions and other social security benefits, and also working for families; income taxes paid by households are deducted. This household income then is adjusted to take account of household size and can be used to show the impact that different tax changes have on households within different equivalised household disposable income deciles.

Using equivalised income allows us to compare different household types but tax can still be a poorly targeted redistributive instrument…

Figure 4 provides a breakdown of households within each equivalised household disposable income decile, and shows that a large proportion of households in deciles 1-3 receive the majority of income from Core Benefits, NZ Superannuation, self-employment, or from non-taxable income (75%, 95% and 75% respectively). This suggests that tax cuts would be a poor mechanism for raising incomes (Beneficiary Households) or that ranking within the bottom 3 deciles may not reflect economic reality (self employed and those receiving non-taxable income). That said there are some 10% of households in each of deciles 1 and 3 that rely on wage income as the majority income source (around 34,000 households in each).

Figure 4: Composition of equivalised household disposable income deciles



Source: Treasury, Household Economic Survey 2003/04

Table 1 indicates the average disposable income for those households within each decile. Because we have ordered different sized households according to equivalised disposable income rather than actual income, the range of actual disposable incomes for households in each decile will vary, i.e. a single person household with $15,000 disposable income may be in a higher decile than a couple with two children with disposable income of $30,000.

Table 1: Average household disposable income by decile

Equivalised household disposable income decile	**Number of households**	**Average Household disposable income**
1	159,730	$13,940.69
2	159,444	$22,054.90
3	159,410	$28,156.79
4	159,775	$41,790.25
5	159,369	$50,431.64
6	159,649	$61,254.45
7	159,493	$67,473.84
8	159,496	$86,519.61
9	159,154	$97,668.78
10	159,899	$159,628.81
TOTAL	**1,595,418**	**$62,902.10**