

Date: 25 March 2010

SH-13-5-2-1



To: Paul Dyer, Office of the Minister of Finance

## **AIDE MEMOIRE: BLOCK ILLUSTRATIONS FOR TAX PACKAGE**

Attached to this Aide Memoire is an updated illustration of the block diagram showing gains and losses of the proposed tax package scenario. It is important to note that the diagrams provide only a dummy illustration at this stage – some of the assumptions underlying the costings and distribution of impact are highly provisional and/or based on assumptions or data that may not be fit for purpose. **Therefore the results in the block diagrams are fairly speculative.** We are still looking for further information on some assumptions and will refine these if further information is available.

We have taken a “top-down” approach, in that we take the revenue costings for each part of an illustrative tax package, and attribute this across three income groups (low, medium and high) according to the proportional impact on these groups.

The block diagrams illustrate the base scenario with and without a company tax cut in 2011/12. The base scenario is not revenue neutral in this year. Because this illustration is for one year only, a tax package that is fiscally neutral over time may not necessarily net to zero in the year illustrated by the block diagram. It should be noted that behavioural and dynamic effects more generally are not incorporated into the costings or this illustration.

The diagrams here are based on a combination of analyses from Household Economic Survey (HES) data (using Taxwell) and Survey of Family Income and Employment (SoFIE) data. Where tax changes can readily be allocated to individuals/households using this data, we have done so directly. Allocation of some of the base broadening measures has been more difficult as they will primarily impact trusts or companies and limited data is available on the incidence of these changes on individuals or households. These aspects of the costings have been allocated to households and individuals using data on dividends received from companies.

For individuals, we have revised the income boundaries between low, medium and high income to \$35,000 and \$70,000. We have also provided a block diagram on a household basis using boundaries of \$40,000 and \$85,000 respectively (for comparison, the average household total income is around \$78,000 according to the HES data) as this roughly equalises the number of households in each group. For the low-income category, a household distinction is more likely to represent those actually facing a low income: low-income individuals are often in a family or household with those on higher incomes.

Also as discussed, we have estimated the average impact of each change for an individual/household in each band, and expressed this as a proportion of the average income in that band. Average income information is based on the HES data.

The costings allocated in the block diagrams are based on HYEUFU data. The diagrams will be revised when final decisions are made and when final BEFU costings are available.

Some points to note on the data/illustrations are:

- The number of individuals or households in the low-medium-high categories, and the average income of each category, is variable and clearly depends on the boundary incomes chosen<sup>1</sup>. These numbers are shown on the diagrams.
- We have included New Zealand Superannuitants and core benefit recipients in the above income categories according to their total income from all sources.
- The incidence of personal income tax and GST compensation is determined from HES data using Taxwell. This micro-simulation model provides quite rich information allowing a fairly good representation of the distribution of impact.
- The impact of GST has been attributed in proportion to the disposable incomes of individuals/households in the three broad income groups. We effectively assume that individuals/households spend all of their disposable incomes, i.e. no-one is either saving or dis-saving. To the extent that saving and dissaving individuals/households are not offset in each of the broad income groups, this assumption may need to be revised in further work.
- The incidence of the removal of depreciation on buildings is based on a combination of SoFIE<sup>2</sup> and HES data:
  - Depreciation denial:
    - Revenue from residential property held directly by households or individuals was distributed using SoFIE data on the distribution of rental properties;
    - Revenue from residential property held indirectly (e.g. through companies and trusts), and revenue from non-residential property, was allocated using HES data on the distribution of dividends. A proportion of this revenue was estimated to impact offshore.
  - Depreciation loading and the company tax cut: A proportion of the revenue was assumed to come from offshore. The remainder of the impact was distributed using HES data on dividend distribution.
  - The tax rate applied is a weighted average of the company tax rate and personal tax rates as set out in the table above. Changing this rate, as well as personal income tax rates, could affect revenue.
  - Thin capitalisation was assumed to impact entirely offshore.

Key assumptions inherent in the allocation of depreciation denial and loading revenue, and company tax changes, are:

- SoFIE rental property data is representative of the distribution of depreciation deductions claimed;
- HES dividend data assumes that the distribution of income from companies is a good approximation of the impact on households from changes that affect companies and trusts;
- The proportion of impact offshore used for depreciation loading and company tax cut is estimated based on Treasury data on the distribution of dividends. A lower estimate is used for depreciation denial as officials assume that the proportion of offshore companies that own property is lower.

**[deleted - privacy], Analyst, Tax Strategy, [deleted - privacy]**  
**Bill Moran, Manager, Tax Strategy, [deleted - privacy]**

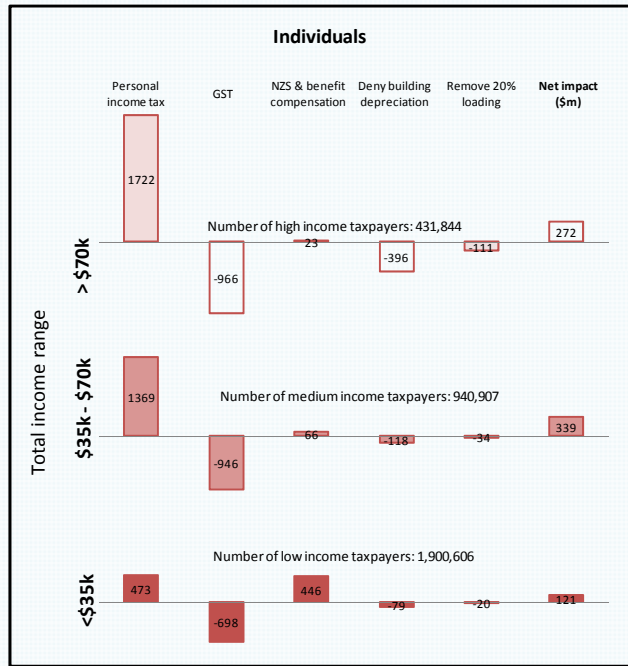
<sup>1</sup> Those with negative incomes have been excluded from the analysis.

<sup>2</sup> Relevant limitations on SoFIE data:

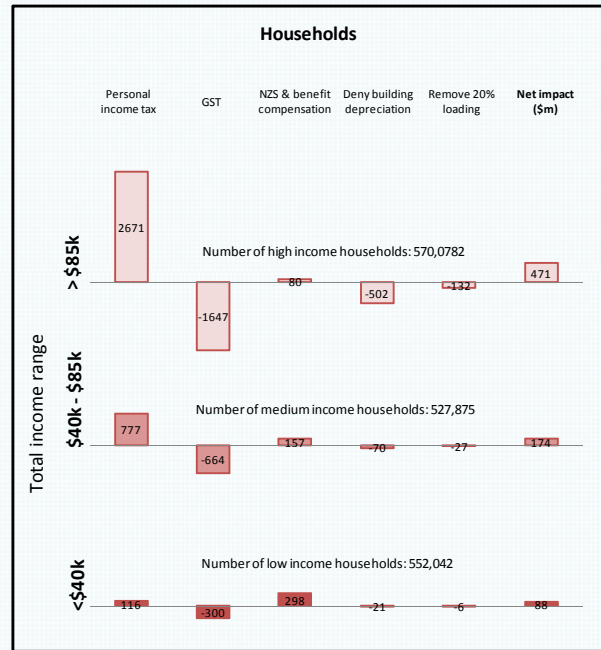
- SoFIE does not include property owned through trusts or companies or property held by non residents
- Some property assets are obscured - e.g. in the "net business assets" category. Otherwise, liabilities held by an individual/household cannot be matched against the asset to which it relates.
- SoFIE gives information on the ownership of all value rather than the ownership of depreciating assets.

## Individuals

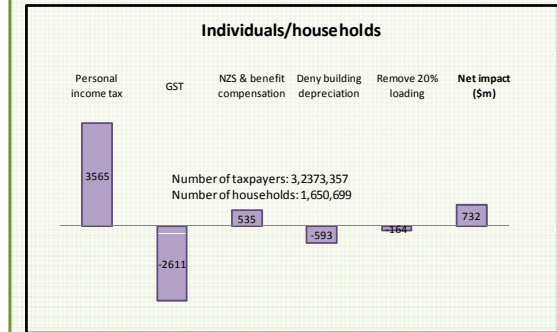
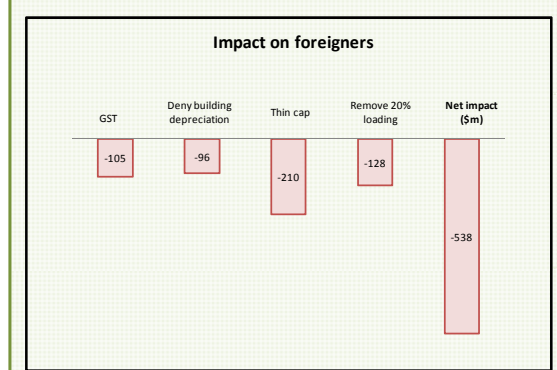
### Aggregate impact



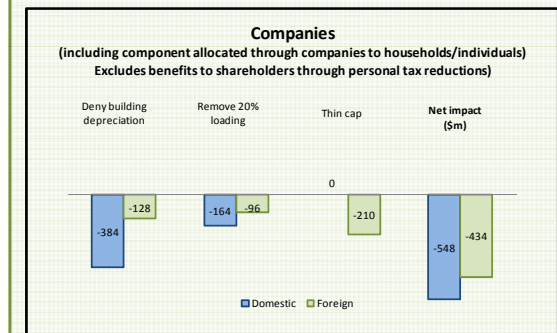
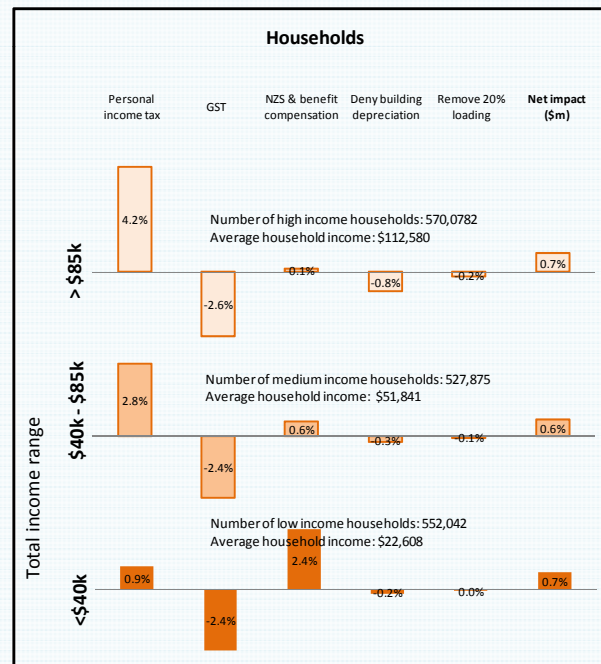
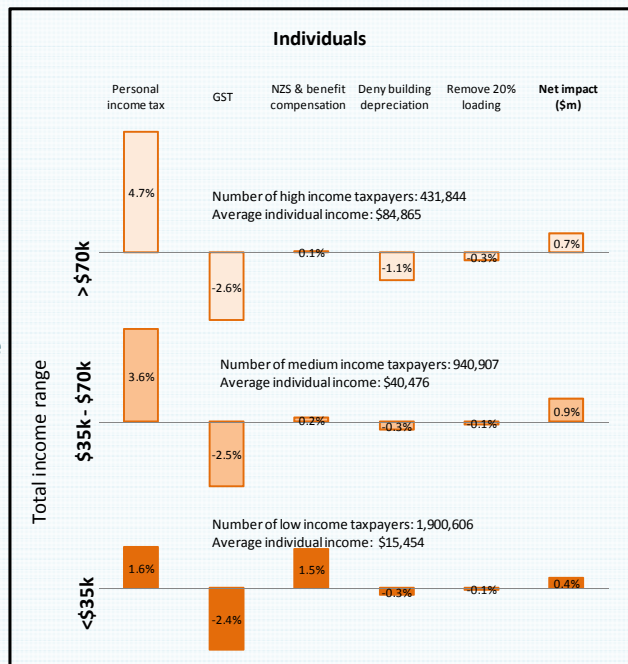
## Households



## Company tax rate 30%

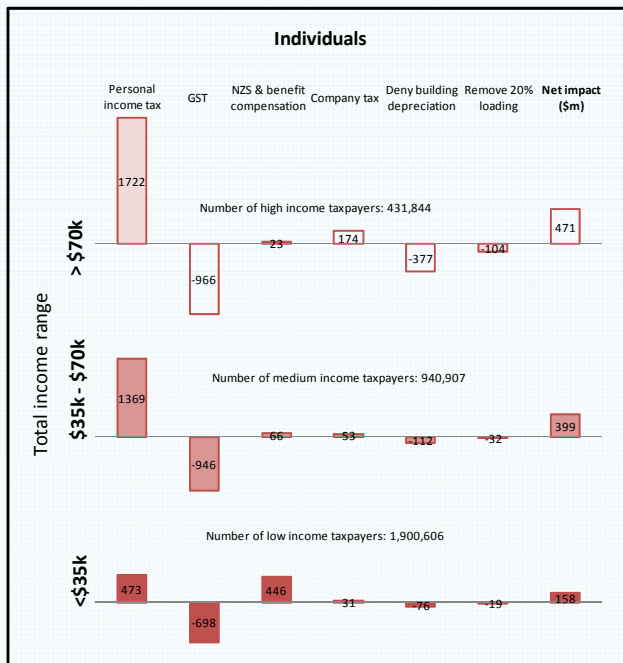


### Percentage impact



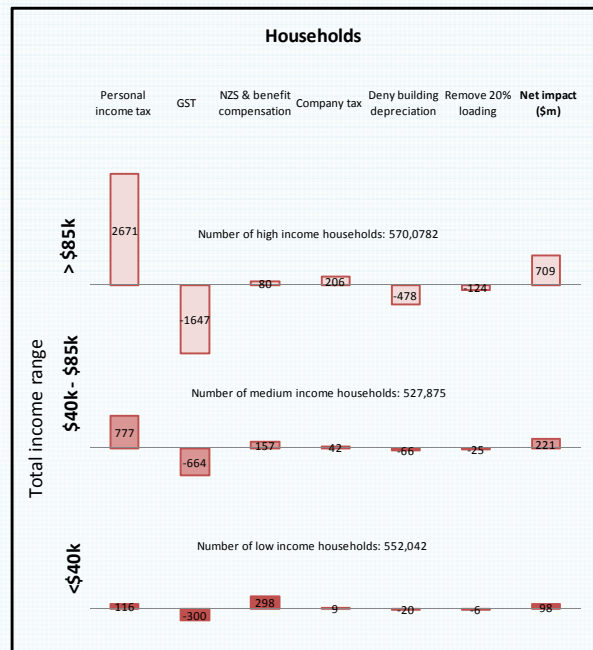
Reconciliation with A3 costings		2011/12
Net impact on individuals/households		732
Net impact on foreigners		-538
Total net impact for block diagrams (rounded)		195
<i>Add items not included in block diagrams</i>		
LAQC		-75
WfF de-indexation		-25
WfF integrity		-15
Capital contributions		-5
Contingency		50
<b>Net impact under latest A3 costings</b>		<b>125</b>

## Individuals

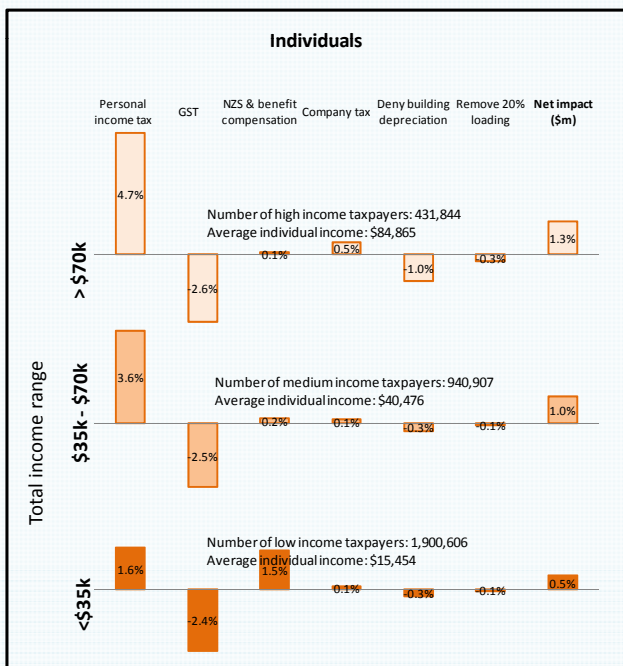
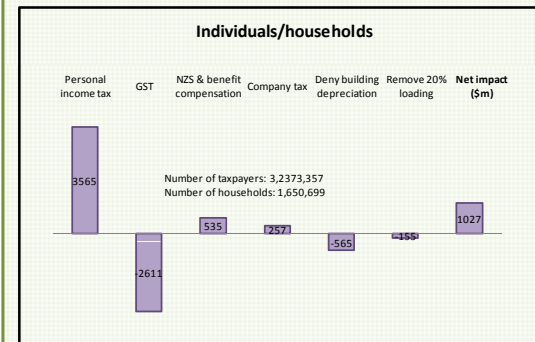
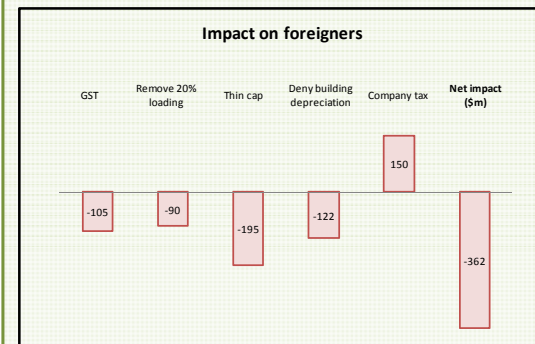


Aggregate impact

## Households



## Company tax rate 28%



Percentage impact

