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THE TREASURY
Kaitohutohu Kaupapa Rawa

To: Mike Nutsford and Paul Dyer, Office of the Minister of Finance

AIDE MEMOIRE: BLOCK ILLUSTRATIONS FOR TAX PACKAGE

At a meeting with Treasury's Tax Strategy team on Friday 22 January, the Minister of Finance outlined an idea of how he would like to see gains and losses of a tax package presented. This note provides a preliminary illustration of what we have understood him to be asking for, and outlines some issues to be further clarified and/or considered.

The Minister outlined two ideas for how the gains and losses of a potential tax package could be presented. We understood these to be:

1. A block diagram showing how the revenue change from each part, and the total net effect, of a tax package impacts high, medium, and low income groups, as well as companies, and
2. A series of family examples (including vulnerable groups) describing the impact from the various tax changes based on their particular situation.

Block Diagram

Attached to this Aide Memoire are preliminary illustrations of block diagrams showing gains and losses of an example 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 require further work – the purpose here is to show how this type of information might be presented down the line. **Therefore the results in the block diagrams are fairly meaningless at this stage.**

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, and/or other entities like companies and trusts.

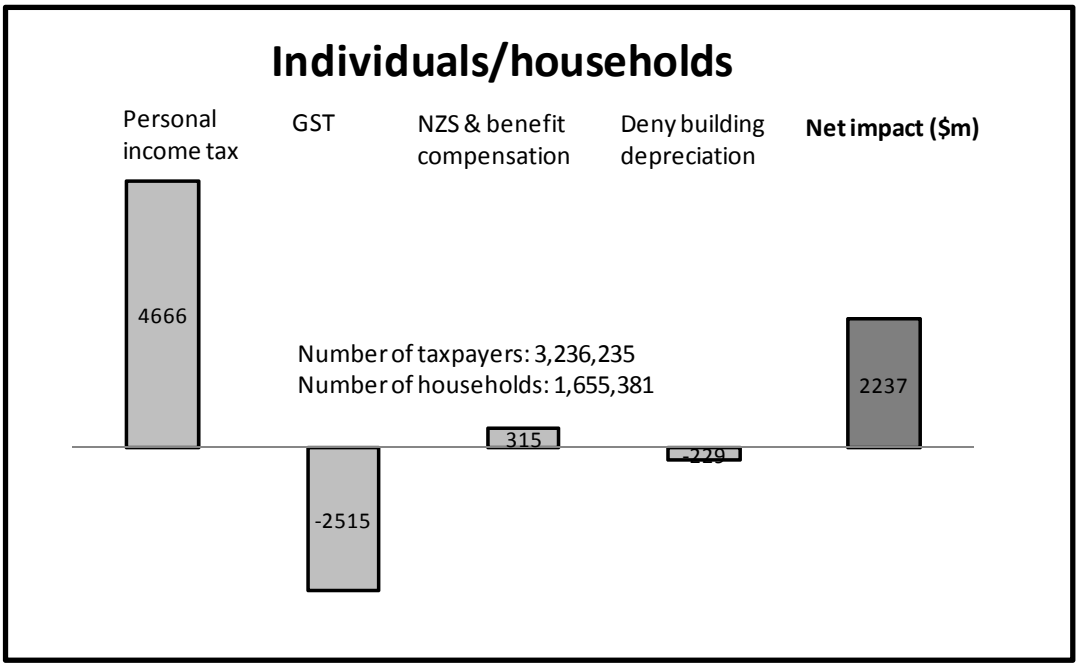
We use the following scenario for illustrative purposes:

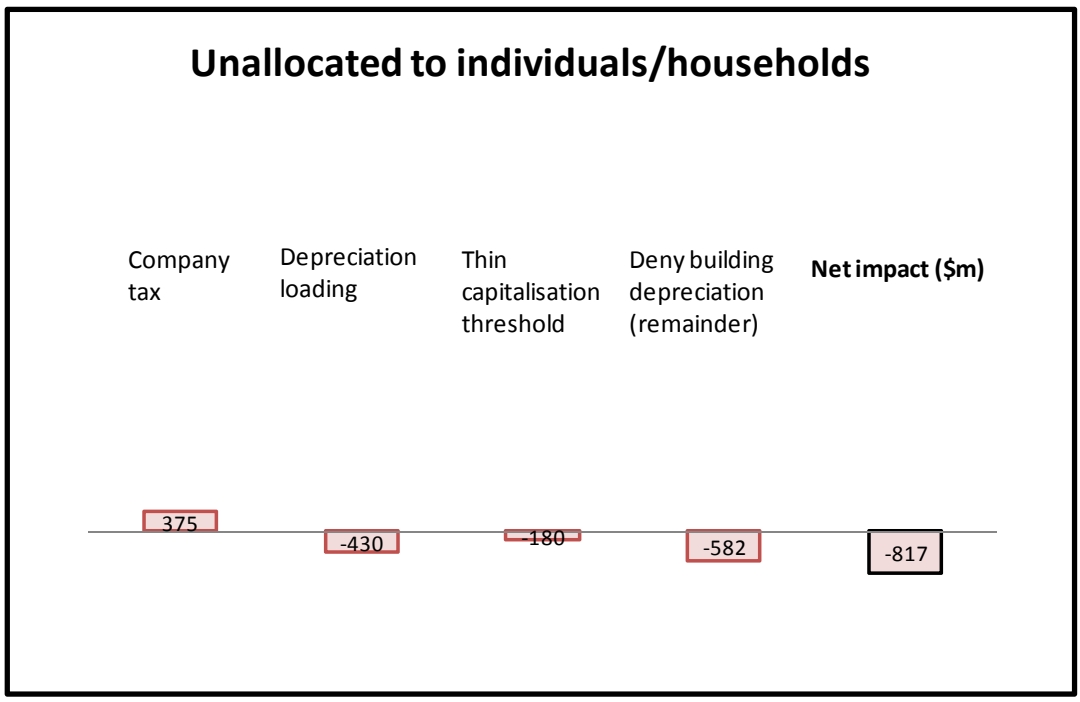
Tax changes		Ballpark cost ($b)*
Personal tax rates		
0 – 14,000	10%	
14,000 – 50,000	17%	-4.7
50,000 – 100,000	30%	
100,000 +	33%	
trust rate (no change)	33%	0
company rate	28%	-0.4
GST	15%	2.5
GST compensation for NZS/benefits	2.22%	-0.3

Deny building depreciation (no losses allowed)		0.8[1]
Remove 20% depreciation loading		0.4
Reduce thin capitalisation threshold to 60%		0.2
Net Revenue Change		**-1.5**

* Costs are only rough static estimates for 2011/12 and assume full implementation by 1 April 2011. Some are specified in tax years, others fiscal years. Interactions between tax types are not accounted for, and the interaction between tax and expenditures on NZS and benefits is not properly accounted for in this basic model. No changes to Working for Families tax credits or the PIE tax rate are assumed. Some figures (e.g. for denying building depreciation) are highly sensitive to underlying policy and implementation assumptions. For example, the denial of depreciation measure assumes no grand-parenting and no allowance of losses or taxing of gains. Importantly, the revenue positive measures are based on the existing tax rate structure (i.e. not that proposed above). Accordingly, new revenue estimates will need to be generated when the various details of the desired measures are known.

[1] The difference between this revenue estimate and the previous revenue estimate of $1.3 billion is largely explained by two factors. Firstly, the previous estimate was based on current market valuations of buildings, whereas depreciation deductions are based on book values (which are in general lower than market valuation). The revised estimate attempts to control for this. Secondly, the first estimate was based on the current tax rate structure, whereas the new estimate allows for the changes to personal and corporate rates as set out in the table above.





Clearly this illustrative package is not revenue neutral (net cost of package = $2,237 - $817 = $1,420 million[2]). Refinement of costings, decisions on policy details, and iterations of a package will be required to reach a broadly fiscally neutral package. In addition, the methods used to attribute the revenues across the income groups are still being refined.

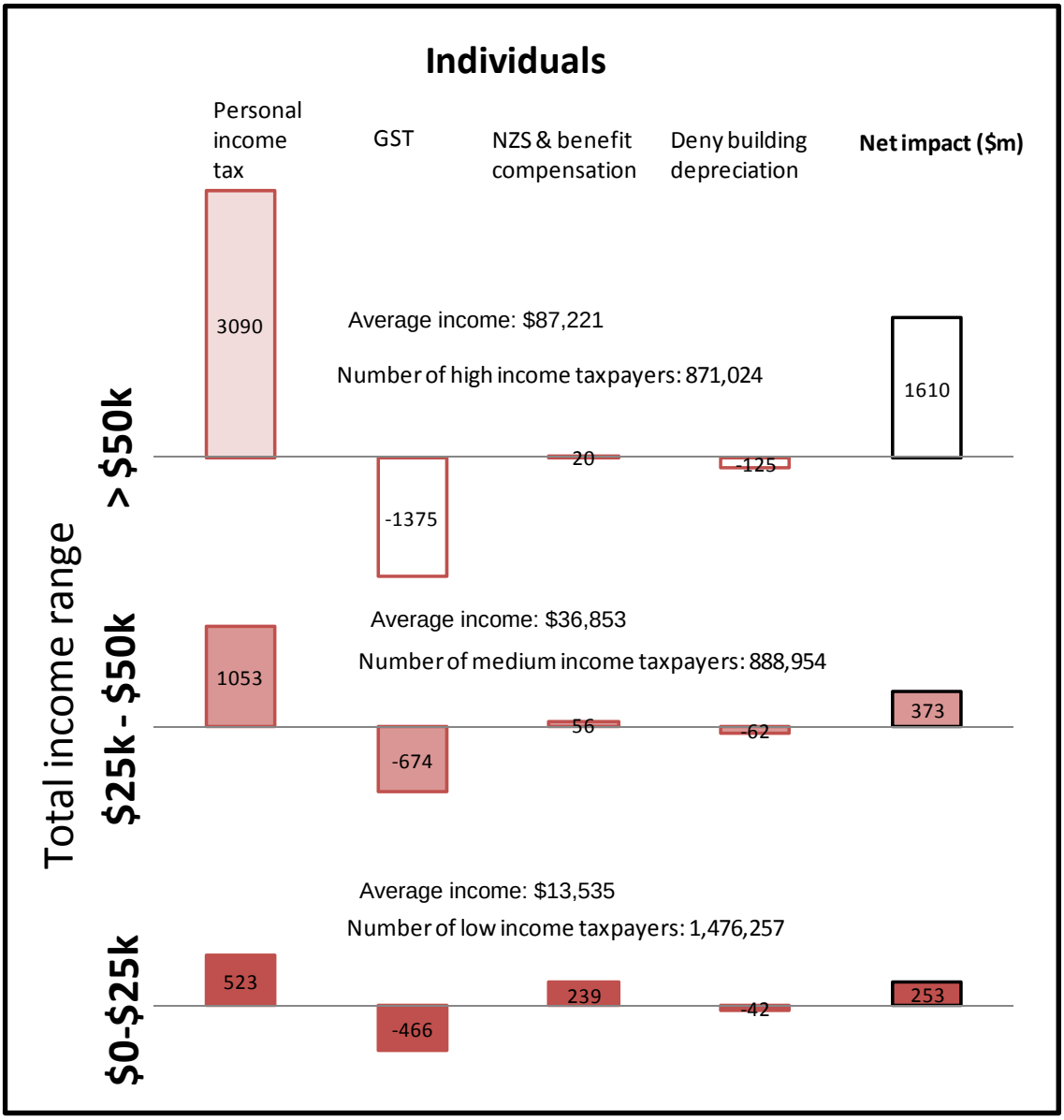
Because this illustration is for one year only, a tax package that is fiscally neutral over time may not necessarily net to zero in the year illustrated by the block diagram. Nonetheless, the block diagram could be used throughout the development of a tax

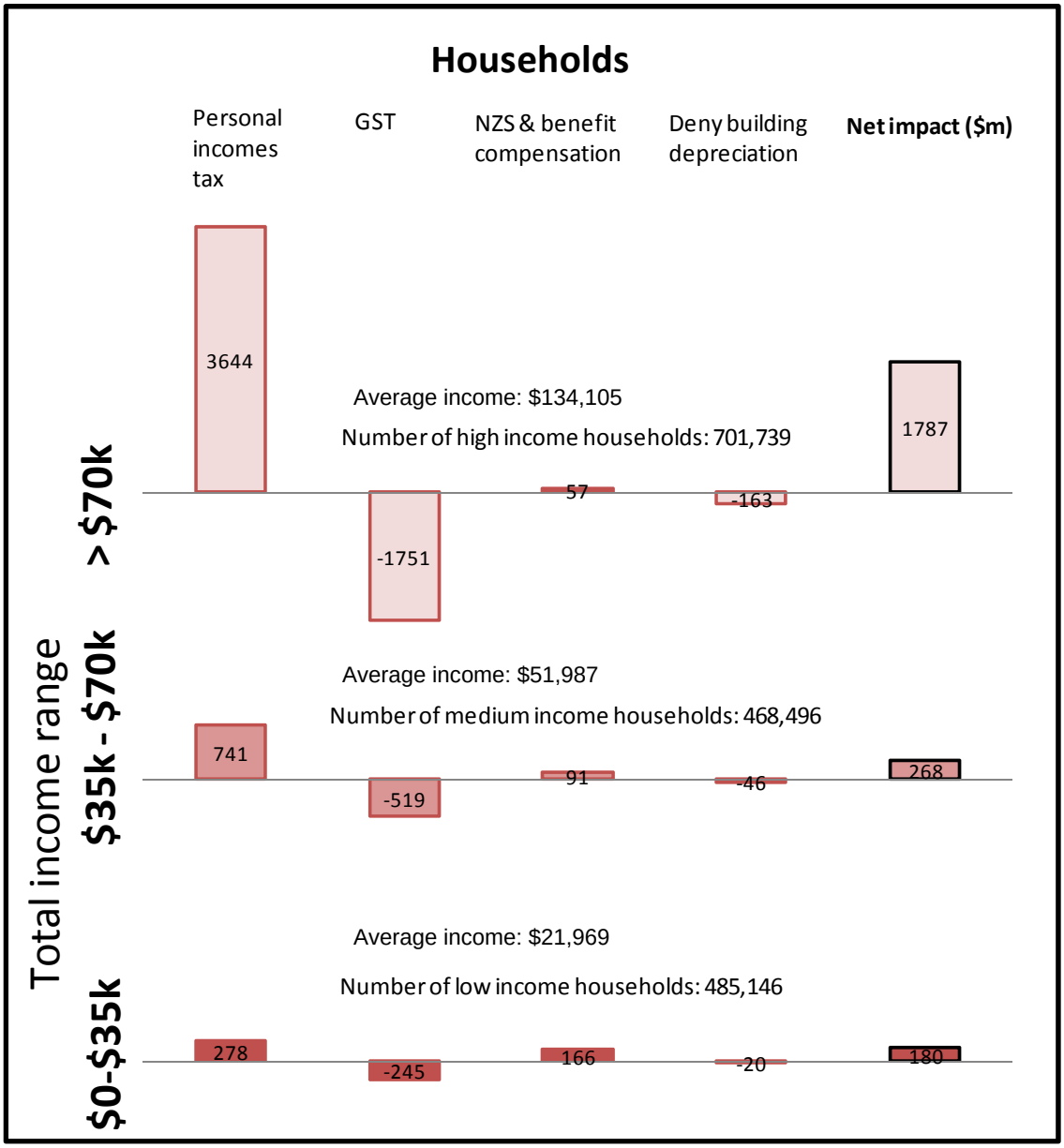
[2] Table above differs from this figure due to rounding errors.

package to show the balance of static gains and losses across broad income groups. It may also be a useful tool for communications around a tax package. (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 – allocation of more of the package may be possible with further work. We note however that full allocation, e.g. of a company tax rate reduction, may be difficult due to limited data about the incidence of such a tax change.

For individuals, the Minister indicated income boundaries between low, medium and high income to be $25,000 and $50,000 (roughly corresponding to the full-time minimum wage and the average wage respectively). We have also provided a block diagram on a household basis using boundaries of $35,000 and $70,000 respectively (for comparison, the average household total income is around $78,000 according to the HES data). 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.


Individuals
Personal income tax
GST
NZS & benefit compensation
Deny building depreciation
Net impact ($m)
Total income range
> $50k
$25k - $50k
$0-$25k
3090
-1375
20
-125
1610
Average income: $87,221
Number of high income taxpayers: 871,024
1053
-674
56
-62
373
Average income: $36,853
Number of medium income taxpayers: 888,954
523
-466
239
-42
253
Average income: $13,535
Number of low income taxpayers: 1,476,257



Some points to note on the data/illustrations are:

- The number of individuals or households in the low-medium-high categories is variable and clearly depends on the boundary incomes chosen[3]. These numbers are shown on the diagrams. An alternative would be to rank the taxpaying population (or households) by income and divide into thirds.
- 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.

[3] Those with negative incomes have been excluded from the analysis here.

- 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 primarily based on SoFIE[4] and QVNZ data:

    - The relative capital investment in commercial/industrial properties, agricultural, and residential properties was taken from QVNZ data. The allocation of the residential properties between owner-occupied and investment properties was done on the basis of census data about residential property ownership. The proportion allocated to individuals/households rather than to trusts and companies was calculated by applying the percentage of investment property to total residential property from the SoFIE data to the total capital stock.
    - The proportion of each capital value allocated to improvements has been calculated by reference to average improvement value to capital value ratios from QVNZ data for each property type.
    - Revenue from the change has then been allocated in proportion to the relative improvement values of the property type.
    - The revenue figure used assumes no grandfathering, no losses on sale, and no gains taxed, and is for the 2011/12 year.
    - The incidence of this on individuals/households has been calculated by using the SoFIE data on the distribution of investment properties to allocate the proportion of the cost allocated to residential property.
    - 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.
    - This model also assumes there is no difference in the likelihood of depreciation being claimed by owners of different property types. We are looking at ways of confirming whether this is the case (if not, the probable impact would be to decrease the impact of the change on residential property owners).

[4] Key relevant limitations on SoFIE data:

- Only looks at property owned directly by households – it does not include property they own through trusts or companies. As an example, it underestimates the amount of residential property (SoFIE estimates approx $420 million; QVNZ data puts residential property at $568 million).
- It does not include non-residents property holdings
- The values are the respondents' estimates of market values (or latest valuations)
- Some property assets are obscured - e.g. in the "net business assets" category. Similarly, liabilities held by an individual/household can't be matched against an asset to which it relates.
- SoFIE gives information on the ownership of assets - but not on the ownership of depreciating assets.

Effect of Tax Reform on Example Families

Here we show how taxpayer examples may be chosen to demonstrate the collective effect of:

- Income tax reductions
- GST increase to 15% with compensating increases to transfer payments (NZS and benefits)
- Reduce depreciation allowances (deny depreciation for buildings and remove 20% loading)
- Company tax reductions

We use six exemplar households here – noting these are just preliminary suggestions, other examples may be more relevant to demonstrate a particular tax package or especially vulnerable groups. The examples could also be expanded to include the effect of Working for Families (e.g. if GST compensation of WFF is included in a package), and also to demonstrate how the changes affect families currently able to rort the system. The examples are constructed for the 2011/12 year.

The initial examples here are:

1. Superannuitant couple, with $200,000 of savings.

2. Unemployment Beneficiary

3. Single earner on $50k labour income (about average full time wage)

4. Single earner on $100k labour income

5. Couple with $100k of household income, split 70/30 and an investment property with a building worth $200,000 generating depreciation

6. A self-employed tradesman on $100k taxable income with $42k vehicle and $20k equipment (both excluding GST) generating depreciation.

Superannuitant Couple with Savings

A superannuitant couple receive $29,954[5] of New Zealand superannuation before tax per year, and have $200,000 invested earning 8% pre-tax per annum. Currently the couple have real disposable income of $38,684.

After the changes their NZS increases to more than offset the higher prices. Their income tax on their savings declines by $640. Overall, their disposable income increases to $40,632. Adjusting for 2.22% inflation expected from the GST increase, in real terms their disposable income has increased by $1,066 (2.8%) to $39,750.

Unemployment Beneficiary working 30 hours a week at minimum wage

An unemployment beneficiary receives $199.06[6] per week in the hand.

[5] Married couple rate, based on HYEFU 2009 forecasts
[6] Single adult rate, based on HYEFU 2009 forecasts

After the changes her benefit increases to $203.40 (2.2%) to offset the higher prices.

If she moved off a benefit into work, working 30 hours a week at the minimum wage ($12.75 an hour), she would currently have an annual disposable income[7] of $16,565. After the changes, this disposable income would increase to $17,151, equivalent to $16,778 once inflation from the GST increase has been accounted for. This equates to a real disposable income that is 1.3% higher than it would have been.

Earner on about the average wage

A worker on $50,000 (about the average full-time wage) currently has a disposable income of $39,600.

After the changes his real disposable income has increased by $1,125 (2.8%) to $40,725.

High-Income Earner

A worker on $100,000 (about double the average full-time wage) currently has a real disposable income of $70,750.

After the changes her real disposable income has increased by $3,383 (4.8%) to $74,133.

Couple with $100k of labour income, and an investment property with a $200,000 building

A couple have $100,000 of household labour income, split 70/30 and an investment property split 50/50 generating a tax loss of $2,000, giving a household income of $98,000. The property includes a building worth $200,000 generating $4,000 of depreciation.

The couple currently have a disposable income of $75,580. After the changes their real disposable income has increased by $4,825 (6.4%) to $80,405.

Self-employed tradesman

A self-employed tradesman has a taxable income of $100,000. He owns a business vehicle worth $42,000 and $20,000 of equipment (both excluding GST) that generate about $18,240 of tax depreciation.

The tradesman currently has an after-tax income of $72,450[8]. After the changes (including the removal of the 20% loading reducing depreciation by $3,040) his real after-tax income has increased by $5,340 (7.4%) to $77,790.

[deleted – privacy], [deleted - privacy]
Bill Moran, Manager, Tax Strategy, [deleted - privacy]

7 ACC levy included at 1.7%
8 Excludes ACC levy.