Date: 24 March 2010 SH-13-5

To: Minister of Finance

**AIDE MEMOIRE: DEBT IMPACT OF A BRIGHTLINE TEST**

## Costings

In response to your request, this aide memoire presents costings for a 5 year and 10 year grandfathered brightline test that would apply only to residential investment properties. These are Treasury estimates; Inland Revenue has not had the opportunity to review these costings in detail. Key assumptions for these costings are noted below.

| | Forecast period | | | | Outyear projections[1] | |
|---|---|---|---|---|---|---|
| $ million | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2020/21 | 2030/31 |
| 5 years | 12 | 37 | 71 | 73 | 88 | 113 |
| 10 years | 12 | 37 | 71 | 111 | 312 | 403 |

Over a 10 year period, the projected revenue is:

| $ million | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 years | 12 | 37 | 71 | 73 | 75 | 77 | 79 | 81 | 83 | 85 |
| 10 years | 12 | 37 | 71 | 111 | 153 | 198 | 243 | 289 | 296 | 304 |

These costings have changed from those in the base broadening report as we have refined our model for grandfathering the impact of these changes. The revised numbers for the 5 year test as set out above are being included in BEFU forecasts.

## Key Assumptions

Key assumptions in these costings:

- **Turnover rate of residential properties**: this is based on the number of residential property sales recorded by QVNZ against the number of dwellings from Statistics census data (from 1988-2009)
- **Holding period profile of properties when sold**: QVNZ data on how long residential properties were held before sale (average from 1988-2009)
- **Appreciation rate**: 2.6% per year. This is based on a low real growth rate (0.6%) and a 2% inflation assumption. It is lower than the average annual real appreciation rate for house prices per the house price index (2.42% on average per annum over the longest available period). However, in reality, the amount of gains will vary with the housing market; and 2.6% nominal growth may be too strong in the short term due to the weak outlook for the housing market, so these numbers represent a maximum in the short run.
- **Tax rate:** the average tax rates used are those used for the depreciation denial and loading costings. They assume the current base scenario and no company tax cut. A company tax cut would reduce the numbers above by approximately 5%.

[1] These are nominal figures (i.e. the effect of inflation is included- for example in real terms (2010/11 dollars) the revenue for a 10 year test in 2013/14 is $105 million; whereas revenue for a 10 year test in 2030/31 in real terms (2010/11 dollars) is $271 million).

- **Behavioural adjustments:** As taxpayers are likely to change their behaviour if a bright-line test is introduced, a 5 year test is costed as a 3 year test. (i.e. the model assumes that if a person would have sold within 3 years, they will still sell within 5; but that if they would have sold between 3 and 5 years, that they will defer the sale until the period has ended). Similarly, we have costed the 10 year test as an 8 year test.
- **Amount of residential investment property in base:** The model uses a $160 billion dollar base for residential investment property. This is a loose estimate based on the range given by SoFIE data ($120 billion) and that used by the Tax Working Group ($213 billion).
- **These costings are grandfathered**: the test is assumed to apply only to properties acquired after Budget day. This reduces the revenue in the early years, but the revenue returns to non-grandfathered level after the number of years of the test has expired.
- **Effective measures to counter avoidance are in place**: losses are effectively ring-fenced, and the test cannot be avoided by structuring through companies.

**Sensitivity analysis**

The costings are particularly sensitive to three of these assumptions. The table below shows the impact of varying these assumptions for the 5 year test:

| | **Lower estimate** | **Base used for costing** | **Upper estimate** |
|---|---|---|---|
| **Turnover rate** | 5% | 9.4% | 15% |
| Revenue ($m) | | | |
| *Year 1* | 7 | 12 | 20 |
| *Year 5* | 42 | 79 | 25 |
| **Appreciation rate** | 2%[2] | 2.6% | 4.4%[3] |
| Revenue ($m) | | | |
| *Year 1* | 9 | 12 | 21 |
| *Year 5* | 59 | 79 | 142 |
| **Behavioural adjustment** | 2 years | 3 years | 4 years |
| Revenue ($m) | | | |
| *Year 1* | 12 | 12 | 12 |
| *Year 5* | 42 | 79 | 119 |

For the 10 year test, these figures are:

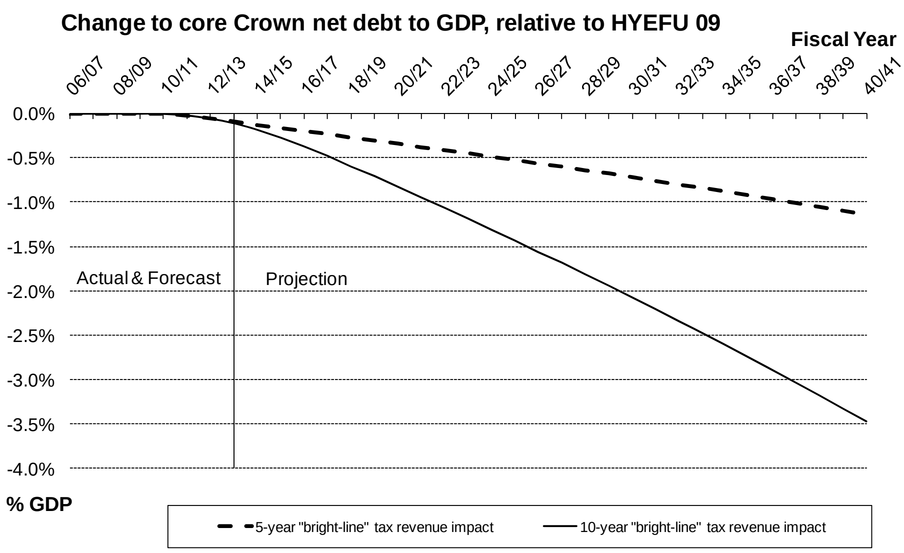
| | **Lower estimate** | **Base used for costing** | **Upper estimate** |
|---|---|---|---|
| **Turnover rate** | 5% | 9.4% | 15% |
| Revenue ($m) | | | |
| *Year 1* | 7 | 12 | 20 |
| *Year 10* | 169 | 319 | 508 |
| **Appreciation rate** | 2%[4] | 2.6% | 4.4%[5] |
| Revenue ($m) | | | |

[2] Effectively assumes only nominal growth.
[3] This is the average real growth rate (2.4%) in the housing price index over the longest available period, with a 2% inflation allowance.
[4] See footnote 2 above.
[5] See footnote 3 above.

| | | | |
|---|---|---|---|
| *Year 1* | 9 | 12 | 21 |
| *Year 10* | 235 | 319 | 614 |
| **Behavioural adjustment** | 7 years | 8 years | 9 years |
| Revenue ($m) | | | |
| *Year 1* | 12 | 12 | 12 |
| *Year 10* | 276 | 319 | 357 |

**Impact on debt**

The impact of a brightline test on debt is shown below. It should not be treated as an accurate projection of these variables- particularly from 2024 onward- but rather as an extension where operating allowances from this year on have been increased to keep debt around 20% of nominal GDP by 2040. This is based on HYEFU data; and assumes that all other policies remain the same, that no behavioural changes occur as a result of the brightline test, and that the other tax reforms have not taken place. The debt impact is due to two factors: the impact of the additional revenue in increasing the operating balance; and the impact of reduced financing costs.

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