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Can fiscal drag pay for the public spending effects of population ageing in New Zealand?

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Abstract

This paper examines the extent to which projected aggregate tax revenue changes, in association with population ageing over the next 50 years, can be expected to finance expected increases in social welfare expenditures. Projections from two separate models, dealing with social expenditures and income tax and GST revenue, are used. The results suggest that the modest required increase in the overall average tax rate projected over the next 50 years can be achieved automatically by adjusting income tax thresholds using an index of prices rather than wages. Based on evidence about the New Zealand tax system over the last 50 years, comparisons of average and marginal tax rates suggest that such an increase may be feasible and affordable. The paper discusses the range of considerations involved in deciding if this automatic increase in

the aggregate average tax rate, via real fiscal drag of personal income taxes, is desirable compared with alternative fiscal policy changes.

Keywords:

population ageing | tax revenue | public expenditure

JEL Classifications:

H20 | H50 | H60

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Notes

1. These cost simulations are based on ‘steady-state’ or ‘full implementation’ assumptions and hence should not be interpreted as capturing expected actual NZS cost changes under more likely implementation scenarios.

2. Given the broad base in NZ, GST is treated as a proportional tax on all expenditure.

3. See http://www.ird.govt.nz/aboutir/external-stats/revenue-refunds/inc-dist-of-ind/

4. This is based on GST revenue in the LTFM spreadsheet of $13,708 million for 2010/2011, and IRD-sourced taxable income for 2010 of $118,051 million.

5. EMTRs differ from statutory MTRs due to additional taxes levied on income such as the social security tax and supplementary ‘war taxes’. Due to lack of consistent data, these effective tax rates do not include an allowance for the abatement of social welfare payments where relevant; see McAlister et al. (2012, pp. 2, 24–25).

6. Goldsmith (2008), for example, records revenue from ‘indirect taxes’, but this includes revenue from excises, such as on tobacco and alcohol, that remained after GST was introduced, and which for consistency are not included in the tax rates shown for any year.

7. The BC model projects a 4.4 percentage point increase in the combined PIT + GST average tax rate (as a percentage of taxable income, including capital income) over 50 years from 2011. This is composed of a +5.2 and −0.8 percentage point change for PIT and GST, respectively. These are converted from ratios of taxable income to ratios of GDP using the 2010 taxable income/GDP ratio of 0.625, and added to the 2010 tax/GDP ratios in Figure 5 to arrive at the 2060 values shown.

8. Recognition that several dimensions are usually involved and trade-offs must be specified explicitly, the New Zealand Treasury (2011) has recently proposed a ‘living standards framework’, which encourages quantification of a number of criteria against which to evaluate the outcomes of a policy change; see Karacaoglu (2012).

9. For example, the BC model projects a rise in the ratio of capital income tax revenue to taxable income from 1.1% in 2011 to 3.1% by 2060.

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