



*Tax Working Group*  
*Te Awheawhe Tāke*

**Tax Working Group Information Release**

**Release Document**

**September 2018**

**[taxworkinggroup.govt.nz/key-documents](http://taxworkinggroup.govt.nz/key-documents)**

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*The advice represents the preliminary views of the Secretariat and does not necessarily represent the views of the Group or the Government.*

# Note on effect of decreasing the rate of GST

## Purpose

1. The Terms of Reference for the Tax Working Group exclude an increase in the rate of GST from the scope of the Group's review. However, the Terms of Reference do not exclude the Group looking at decreasing the rate of GST.
2. The purpose of this note is to provide an assessment of the impacts of a general reduction in the rate of GST, and a reduction in the rate of GST for necessities only. The advice provided in this note has been drawn together quickly and should be taken as indicative, in particular for the fiscal and distributional figures.

## Key messages

- Reducing the rate or base of GST has a high fiscal cost. Decreasing the rate of GST by 1% point has fiscal cost of \$1.1 billion. Decreasing the size of the GST base by 1% has a fiscal cost of \$190 million.
- The distributional impact of reducing the rate of GST when measured against expenditure is proportional and when measured against current income is progressive.
- However, a reduction in the rate of GST generates larger benefits in absolute dollar terms for higher income households than lower income households. Other redistribution mechanisms, such as welfare transfers, can deliver greater benefits for lower income households at the same or lower fiscal cost.
- A multi-rate GST system is complex, has high efficiency costs and results in arbitrary boundaries. Welfare transfers or excise taxes, are likely to be more effective and lower cost mechanisms at achieving distributional or behavioural goals.

### 1. A reduction in the rate of GST

3. A decrease in the GST rate is generally proposed on distributional grounds (i.e. to reduce the impact of taxes on lower income households). The goal of a decrease in the GST rate can be considered to be improving social capital and improving the vertical equity and fairness of the tax system.
4. However, when considering a reduction in the rate of GST, the key consideration will be how to make up the lost revenue. Any increase in revenue will also have impacts on wellbeing that will need to be considered alongside any benefits arising from the reduction in GST. Due to time constraints, this note considers a GST reduction in isolation, but a full assessment of a reduction in the rate of GST will depend on what measure is used to raise revenue alongside it.
5. It is also important to consider whether a decrease in the GST rate is the best means to improve equity and respond to distributional concerns.

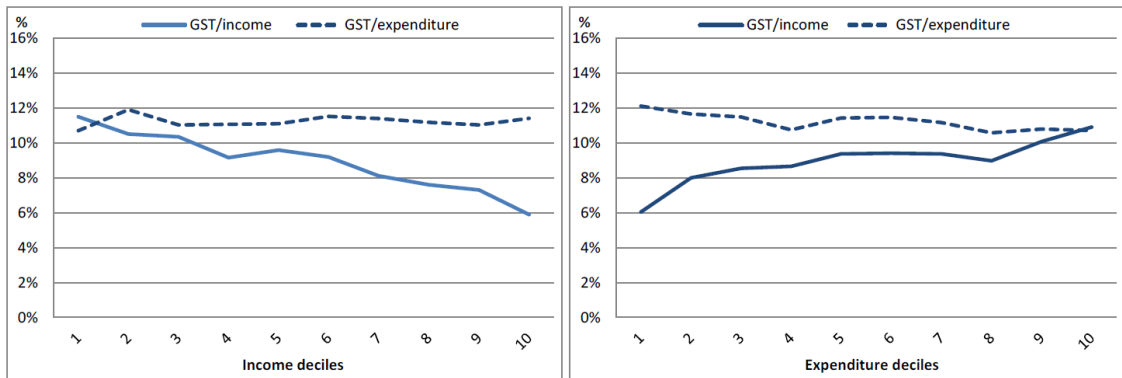
**Fiscal impact**

6. A decrease in the rate of GST by one percentage point has a fiscal cost of \$1.1 billion<sup>1</sup>.

**Distributional impact**

7. In the officials’ background paper on GST, we outlined the distributional impact of GST when measured against a household’s current income and expenditure. GST can be considered regressive when measured against current income, but roughly proportional when measured against expenditure.

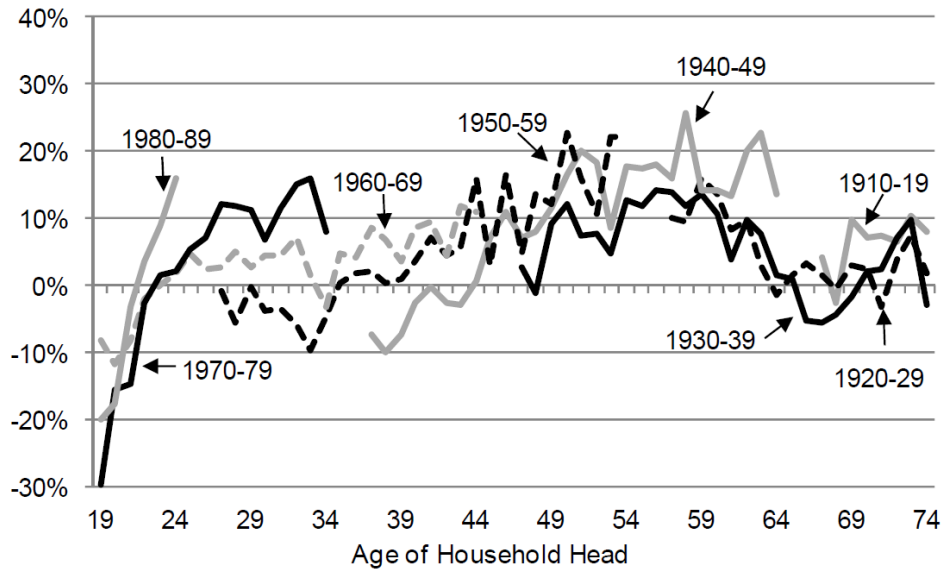
**Figure 2: Average GST burdens per household**



8. As outlined in the background paper, comparing GST against expenditure is often considered a better measure because it takes into account a household’s lifetime income. This is because a person’s income will generally change over their lifetime as they save for retirement. They will generally consume a high proportion of their current income while young while young, less while over their working life and consume a high proportion of their current income when retired.

<sup>1</sup> <http://www.treasury.govt.nz/government/revenue/estimatesrevenueeffects/estimates/index.htm#notes10-17> This is excluding GST on government expenditure which is fiscally neutral.

**Figure 2: 10-year-birth cohort mean HES saving rates by age of household head**



(Vink, 2014)

**Table 5: Saving Rates Treating New Zealand superannuation and health-care on a save-as-you-go basis.**

Age	HES Saving Rate	Saving Rate with mandatory saving/pensions	Saving Rate with mandatory pensions and healthcare
19-24	3.5%	9.5%	13.5%
25-29	6.8%	12.8%	16.8%
30-39	7.6%	13.6%	17.6%
40-49	13.2%	19.2%	23.2%
50-59	20.2%	26.2%	30.2%
60-64	11.3%		
65-74	15.1%	-41%	-85%
75+	27.3%	-21%	-117%

Source: authors calculations.

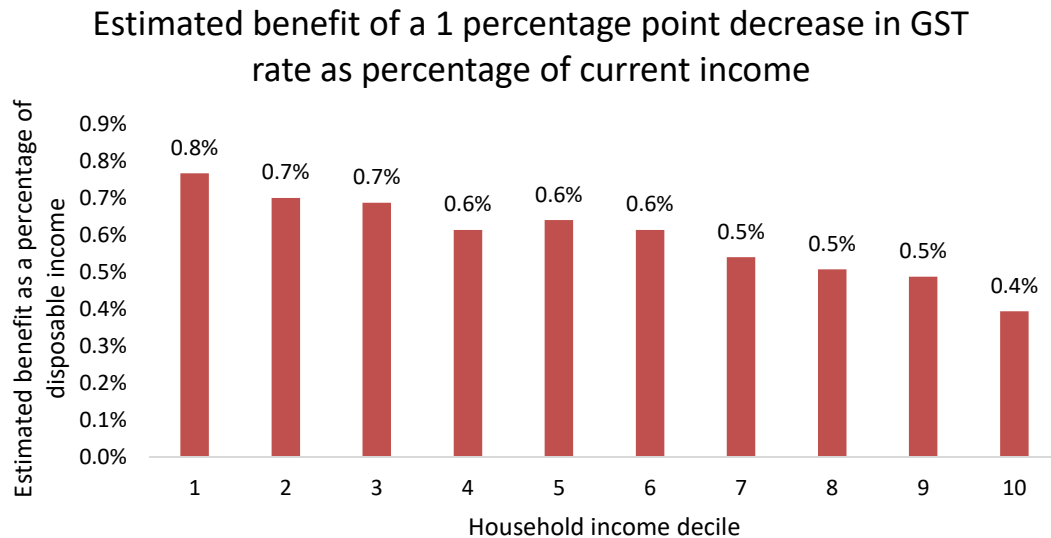
(Coleman, 2006)

- As a result, when compared against current income, GST burdens will look relatively low when a household is saving and relatively high when they are retired or young<sup>2</sup>.

<sup>2</sup> As many households leave bequests it is unlikely that GST is exactly proportional to lifetime income. If the bequest is consumed in New Zealand, then GST may be considered proportional, however if consumed outside of New Zealand it may lead to GST being more regressive. This however is potentially matched out by consumption in New Zealand of wealth earned offshore.

*Distributional impact of decrease in GST rate by 1%*

10. We would expect the impact of a reduction in the GST rate of 1% to be relatively proportional when compared against expenditure (as a proxy for lifetime income or wellbeing).
11. When compared against current income, we would expect a reduction in the GST rate to be progressive.



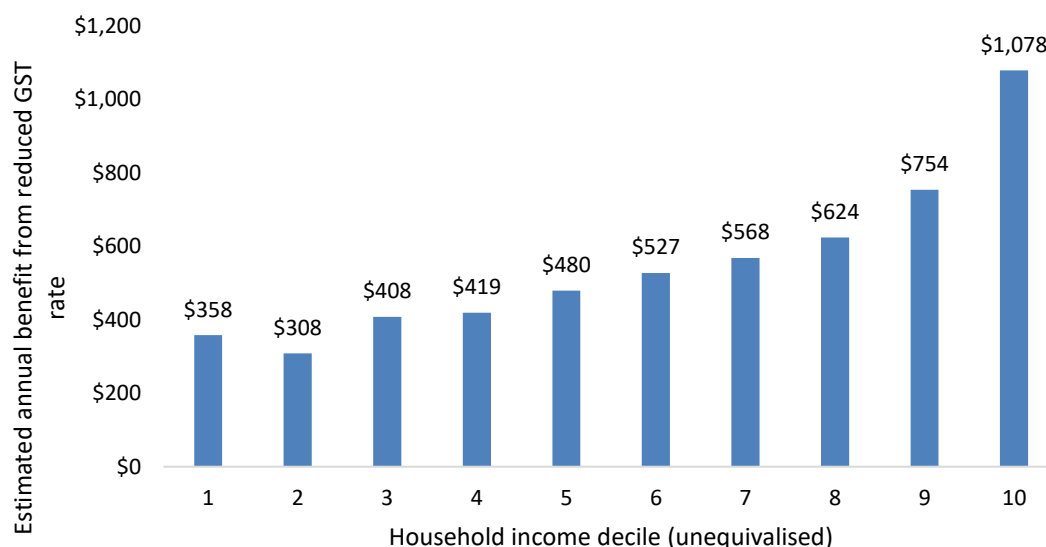
Estimate based on figures provided in (Thomas, 2015)

12. However, in absolute dollar terms, a higher income household will derive more benefit from a decrease in the GST rate than a lower income household. The following chart provides a rough estimate of the absolute dollar benefit of a 1% point reduction in the GST rate by household income decile.
13. As can be seen a 1% point reduction will benefit a decile 10 household by \$1,078 a year (\$20.74 a week) and a decile 1 household by \$358 a year (\$6.89 a week).<sup>3</sup> With the same amount of revenue we estimate that a transfer to all households of \$568 a year could be made. Alternatively for a lower fiscal cost a targeted transfer to all lower income households could be made.

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<sup>3</sup> This estimate should be taken as indicative. The estimate looks at impact of GST using household expenditure survey figures while excluding certain expenditure on housing and financial services. However, given time constraints the removal of items housing and financial services items is imprecise.

### Estimated yearly benefit of reducing GST rate to 14%



### *Impact on wealth*

14. One of the impacts of reducing the GST rate is that it provides a windfall gain to persons with existing wealth at the date of the reduction in the rate. This is because a reduction in the GST rate will increase the purchasing power of existing savings.

#### **Example scenario: The impact of GST rate reductions on savings**

Take a person who has \$1,150 in savings.

If the average price of a good is \$10 + \$1.50 in GST then this person's savings of \$1,150 is effectively worth 100 average goods.

If the GST is reduced to 10% the person will now be able to acquire 104 of these goods with their existing savings of \$1,150. The reduction in GST provides them a windfall gain through an increase in the purchasing power of their existing savings.

15. It is difficult to estimate the extent of this impact on wealth. However, following the logic of the example above, a 1% point decrease in the GST rate would be expected to increase the purchasing power of existing wealth by around 0.87% (1/115).

### *What is the best means to improve equity and achieve distributional goals?*

16. A reduction in the rate of GST will generate larger benefits in absolute dollar terms for higher income households than lower income households. Other redistribution mechanisms, such as welfare transfers, can deliver greater benefits for lower income households at the same or lower fiscal cost.

### ***Transition costs***

17. A change in the rate of GST rate will generate compliance costs during the transition to the new rate. In addition to the general costs imposed on firms as they change their pricing and adjust their GST processes, there will be particular transition costs when contracts span over the application date of a rate change.
18. In addition it will take some time to transition from an announcement of a reduction in the rate decrease to the actual implementation of the reduction. During this time, there is likely to be a decrease in consumer purchases, and especially of higher value purchases.

### **2. Decrease in GST rate for necessities or other items**

19. One other issue that the Group may wish to consider is of the possibility of reducing the rate of GST for necessities, with a higher rate for luxuries. As the Terms of Reference exclude consideration of an increase in the rate of GST, this section provides an assessment of the impact of reducing the rate of GST for necessities only.
20. A lower rate for necessities may be considered desirable on distributional grounds (i.e. to improve vertical equity). It may also be considered desirable as a means to encourage particular behaviour. For example the goal may be to improve human capital, by encouraging people to make healthier choices, or natural capital, by encouraging environmentally desirable activities.
21. However, as outlined above, the key consideration associated with a decrease in GST is the impact of the other measures needed to make up the foregone revenue. Consideration also needs to be given as to whether GST is the best means for achieving distributional or other goals.
22. The impact of removing food from the GST base was outlined in the officials' issues paper. There are similar considerations when considering a reduced rate for necessities.

### ***Fiscal impacts***

23. The fiscal impact of a targeted reduced rate will depend on the design of the reduced rate. However, any significant reduction in the GST base can be expected to be fiscally expensive. Each decrease in the size of the GST base<sup>4</sup> by 1% has a fiscal cost of \$190 million.

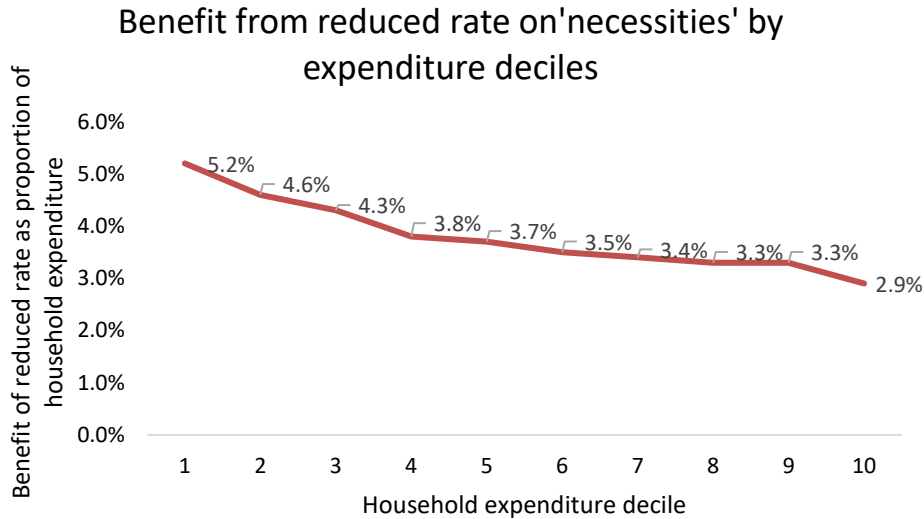
### ***Distributional impact***

24. A separate rate for necessities and luxuries is similar to the current value added tax structure in the United Kingdom. Alastair Thomas has modelled the impact of moving

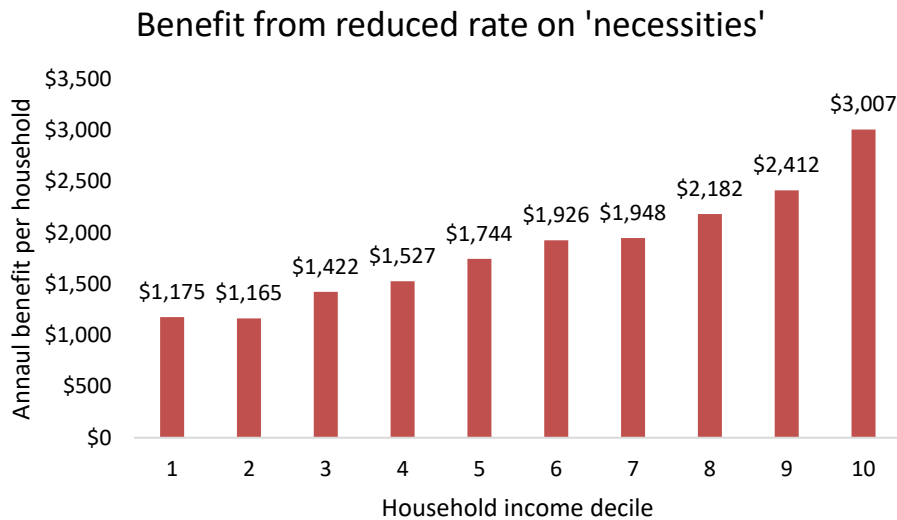
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<sup>4</sup> This is referring to a reduction in the GST base, (i.e. the goods and services which GST apply to), rather than the GST rate.

to a UK value-added tax rate structure for New Zealand. Thomas' showed that such a move would have a progressive effect, lowering GST burdens proportionately more for poor households than for rich households when measured against household expenditure (Thomas, 2015).



- 25. This move would also provide progressivity when measured against income.
- 26. However moving to a multi-rate structure similar to the United Kingdom would provide significantly more benefits to richer households than poorer households in absolute dollar terms. As a result, a multi-rate structure is generally considered a poorly targeted means to achieve distributional goals.



(Thomas, 2015)



## ***Complexity***

27. The introduction of multiple rates will increase complexity and result in arbitrary boundaries. The experience of the United Kingdom is illustrative in the complexity that arises in trying to draw boundaries between different categories of goods (the officials' background paper on GST provides examples of complexity regarding the treatment of food).
28. International reviews have also noted the cost of GST exceptions. The Mirlees Review in the UK noted that a single rate system of GST was preferable over its multi rate system:

*This is not simply a preference for textbook tidiness. Moving towards a more uniform rate would increase consumers' welfare by distorting their spending decisions less. People would make choices based on relative prices that reflect the underlying costs of producing the goods rather than differences in tax rates. Our calculations suggest that if almost all zero and reduced rates of VAT in the UK were removed, the government could (in principle) compensate every household to leave them as well off as they were before and still have about £3 billion of revenue left over.*

(Mirrlees, et al., 2011)

29. A European review of VAT rates found that:

*There is ample practical evidence that compliance costs may be substantial in reduced VAT schemes. In Sweden, 20 percent of all VAT disputes between enterprises and tax authorities are linked to arguments about whether a particular product should be subjected to a low or high VAT rate. In Ireland, the differentiation between healthy and unhealthy foods has led tax authorities to define 89 different categories of food, including separate categories for healthy non-roasted almonds and unhealthy roasted almonds. In the UK, an enterprise won a legal case where tax authorities claimed that selling a warm Ciabatta sandwich was catering while the firm successfully held that it was just food and therefore subject to the lower rate of food.*

(Copenhagen Economics, 2007)

30. As a result, we would consider that income tax or welfare transfers are likely to achieve greater distributional benefits, with lower fiscal and efficiency costs, than having a system of multiple GST rates.

## ***GST as a corrective tax***

31. Differential GST rates have also been proposed as a means to achieve behavioural changes. The rationale for changing behaviour can be based on externality grounds (where individual actions impose costs on others, such as pollution, that the individual

does not personally bear). The purpose of a corrective tax is to make the individual bear the cost of this behaviour.

32. Behavioural change can also be considered desirable as a means to address where people may take actions that are against their best interests due to lack of information or other circumstances (for example people consuming unhealthy foods).
33. As GST is a tax on consumers it can be used to influence the choices of consumers<sup>5</sup>. For example, differential GST rates have been proposed overseas to help achieve environmental goals<sup>6</sup>.
34. However, as outlined earlier, GST exceptions are complex, inefficient and create high compliance costs. If changes in consumer behaviour are desired, excise taxes or other measures are likely to be a simpler, more targeted means of changing behaviour.
35. Discussion by the Group of corrective taxes and financial sector taxation is planned for the meeting on 6 July.

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<sup>5</sup> As GST is not a cost to businesses, it would not be effective at influencing businesses choice of production inputs.

<sup>6</sup> Some examples of this are provided in the appendix.

## Appendix

36. A number of countries have introduced or proposed changes to GST rates to achieve environmental goals. Sweden has recently reduced its VAT rate, from 25% to 12% for all repair services. Luxembourg also has a reduced VAT rate of 8% for repairs instead of its standard rate of 17%.
37. In 2014 the House of Commons in the United Kingdom (UK) ordered a report to investigate proposals to support a transition away from a linear economy (one in which the materials used to make a product and any waste are thrown away) and towards a more circular economy (which involves more recycling). This report recommended that the UK Government introduce a differential VAT rate based on the life-cycle analysis of the environmental impact or recycled content of goods, as well as lower VAT rates for businesses that repair goods.
38. The OECD are currently investigating the economic impacts of tax instruments for environmental goals and other associated policies.

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