



*Tax Working Group*  
*Te Awheawhe Tāke*

**Tax Working Group Information Release**

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

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# Coversheet: **Personal tax rates and thresholds**

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*Position Paper for Session 21 of the Tax Working Group*  
*26 October, 2018*

## Purpose of discussion

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This paper provides advice to the Group on options for changes to the personal tax rates and thresholds for potential inclusion as part of wider revenue neutral packages.

## Key points for discussion

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What are the Group's goals for any personal tax rate and threshold changes?

## Recommended actions

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We recommend that you:

- a **note** that this paper provides more detailed analysis of personal income tax and threshold options outlined in the paper *Potential revenue-neutral packages*.
- b **direct** the Secretariat as to the preferred options that the Group would like more analysis on.
- c **agree** for more analysis to be undertaken to understand the distributional impacts of the Group's preferred option.

# Personal tax rates and thresholds

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*Position Paper for Session 21  
of the Tax Working Group*

October 2018

*Prepared by Inland Revenue and Treasury*



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# 1. Introduction

## 1.1 Purpose

1. In its Interim Report, the Group noted that it would provide recommendations regarding potential changes to personal tax rates and thresholds of income tax in its Final Report in February 2019. The Interim Report made some comments regarding considerations for changing rates and thresholds.
2. The main conclusions from previous officials' advice (released alongside the Interim Report) suggest the following:
  - If the goal of the reform is to improve disposable incomes of the poorest households, transfers (e.g., welfare benefits or tax credits) are generally more targeted than income tax reductions.
  - Some people who have low taxable incomes will not necessarily have persistently low household incomes. In particular, many of those with low taxable incomes are those with temporarily low incomes (e.g., 15-24 year olds and students), those who get support through the welfare system (i.e., superannuitants and social welfare recipients), or those with low incomes who are in higher income households.
  - Income tax reductions would generally be a more expensive way of assisting the poorest households compared to changes in the transfer system as reductions in the lowest tax thresholds will also increase the disposable income of higher income households. This is because anyone earning income above the threshold(s) where tax rates are reduced receives the full benefit of the rate reduction.
  - If the goal of reform is to provide benefits that target low and middle income earners (for example a full time worker on the minimum wage), then the transfer system will be a more effective tool than the tax system if the goal is solely to provide income support. Income tax reductions would generally be a more expensive way of assisting these households.
3. This paper provides advice to the Group to help inform its further consideration of these issues. The following table provides some guidance on the options available to achieve particular goals, taking into account the terms of reference restrictions on increasing any tax rates.

**Table 1: Goals and measures**

<b>Goal</b>	<b>Measure</b>	<b>Points to note</b>
Improve disposable incomes of the poorest households	Increase welfare benefits	This option is outside the Group's mandate but is an important possibility to keep in mind.
Increase progressivity of the tax system on an individual basis	Tax-free zone or reduce the 10.5% rate.	Some of the cost of this will arise from cutting taxes on those such as students/children, many of whom only have temporary low incomes. Higher income households also receive the maximum benefit in dollar terms from this change.
Improve disposable incomes of full-time working lower income earners	Reduce 17.5% rate or increase first (\$14,000) tax threshold.	Limits benefits to students/children who may only have temporarily low income
Improve disposable incomes of full-time working lower income earners and limit benefits to higher income earners	Reduce 17.5% rate and increase 30% rate or do something similar through threshold changes.  Introduce abating low-income tax credit	Provides benefits to lower income earners without benefits also passing to higher income earners. This will increase effective marginal tax rates for anyone facing the rate above current 17.5% rate, or anyone whose low-income tax credit is abating. Increasing the 30% tax rate is also outside the Group's mandate but this is another option to consider

4. This paper should be considered in conjunction with the paper *Potential revenue-neutral packages*. This paper illustrates some options that may be available to the Group as part of a wider revenue neutral package.

## **1.2 Content and scope**

5. Initial advice from the Secretariat, released alongside the Group's Interim Report, included a brief discussion on changes to tax rates and thresholds. The options

presented were a mix of decreasing rates, increasing thresholds, offering a tax free threshold, inflation indexing income tax brackets, and decreasing the GST rate.

6. This paper explores potential changes to personal income tax rates and thresholds and how these could be used to meet the objective of enhancing the living standards of New Zealanders, particularly for those on low incomes.
7. This paper does not provide further analysis on reducing the GST rate. The Group concluded in its Interim Report that this rate should not be changed. This paper also does not consider increasing the top tier income rate because that is outside the Group's terms of reference. In addition, this paper does not provide any further advice on inflation-indexing or one-off adjustments to income tax thresholds to mitigate fiscal drag. The Group has also ruled out these options.
8. The table in Appendix B illustrates that, under current policy, a change in tax rate will not flow through to benefits for most recipients of social welfare payments (the main exception to this is New Zealand Superannuation). This occurs as many benefits are set as an after-tax amount. In its interim report, the Group noted that they believe that income tax reductions should benefit all low income households, including households in receipt of social assistance payments.
9. Given that the scope of this paper is options available within the tax system, it does not provide analysis of how the objectives could be met by changes to the transfers system (ie, benefits or tax credits). However, it is noted where the transfers system might be better placed to meet objectives. It is also noted that both the tax and the transfer system have impacts on marginal tax rates (the transfer system through benefit abatements) and affect incentives to work, save and invest.
10. The Secretariat also notes that the Welfare Expert Advisory Group (WEAG) is reviewing the welfare system. The WEAG may recommend changes to tax credits and other transfers to support income adequacy and poverty reduction, or otherwise improve the transfer system. The Secretariat will recommend to Ministers that any changes to tax rates and thresholds should be considered alongside any recommendations made by the WEAG.
11. This paper presents analysis based on tax cuts which would cost approximately \$2 billion per annum. This builds on options that were examined as part of officials' advice prior to the Interim Report. This is the estimated cost of the tax cuts but does not include any costing for adjustments to provide benefit recipients with an equivalent increase in income. Extending the analysis to allow benefit recipients an equivalent increase in income will be carried out more fully as part of advice for session 23. However, indicative examples, of likely effects are provided in Appendix C to this report to give a preliminary impression of what the costs of doing this are likely to be. Further analysis of the Group's preferred option(s) could also consider how various options could be scaled for a different level of costing.
12. This paper provides some distributional analysis on how different groups of taxpayers with different income levels would be impacted by changes to tax rates or thresholds. More detailed analysis can be provided once the Group provides an indication of its preferred directions of reform, including how tax changes interact

with abatement of welfare and social assistance to provide effective marginal tax rate analysis.

## 2. Problem definition and objectives

### 2.1 Context

13. One of the key tasks for the Group has been to assess the structure, fairness, and balance of the tax system. The Group noted in its Interim Report that while the tax system has many strengths, it is not particularly progressive.
14. The Group noted that their objective in considering change to personal income taxation was to enhance the living standards of New Zealanders, particularly for those on low incomes. Further, that their deliberations over the coming months would be informed by several key metrics:
  - The distributional impact of options for change – including judgements on how options for change affect the progressivity of the tax system, and whether taxes or transfers are the best option for improving the living standards of lower income households.
  - Impacts on incentives to save, work, and invest.
  - The extent to which options increase or reduce the integrity of the tax system.
  - The revenue impacts of options for change.
15. The Interim Report also stated that reductions to the lower tax rates and/or thresholds would be the most progressive means of assisting low and middle income earners through the tax system. If the Government wishes to improve incomes for very low income households, on the other hand, the best means of doing so will be through welfare transfers. Ultimately the progressivity of the tax system will also be impacted by any other changes, for example extending the taxation of capital gains which will also increase the progressivity of the tax system.
16. Further, the Group noted that they believe that income tax reductions should benefit all low income households, including households on benefits. To that end, the Group stated that any tax reductions will need to be paired with equivalent increases in benefit levels to ensure a fair treatment of all income earners. So far we have only been able to provide very rough indicative costings for equivalent increases in benefits for the options presented in this paper (see Appendix C).<sup>1</sup> Ultimately, Ministers will need to consider any changes to tax rates and thresholds alongside any recommendations made by the WEAG.
17. The income tax system works on an individual basis. Accordingly, delivering any of these outcomes through changes to the income tax system would impact taxpayers on an individual basis. Measures which depend on family circumstances, such as Working for Families tax credits are not being considered in this paper.
18. In considering the best option for altering personal tax rates or thresholds, it is necessary to clearly identify the objectives the Group wants to achieve. The Secretariat has identified some potential objectives, as follows:

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<sup>1</sup> These estimates make use of various simplified assumptions, and should be interpreted with caution.

- To reduce income inequality generally.
- To improve disposable incomes of the poorest households.
- To provide benefits that target low to middle income earners (for example a full time worker on the minimum wage).
- To improve incomes for low to middle income earners and at the same time also have additional benefits to labour supply, savings and productivity.

## 2.2 Current tax profile

19. Current tax rates and thresholds are as follows:

**Table 2: Current tax rates**

Income	Tax rate (%)
0 - \$14,000	10.5
\$14,001 - \$48,000	17.5
\$48,001 – \$70,000	30
\$70,001 +	33

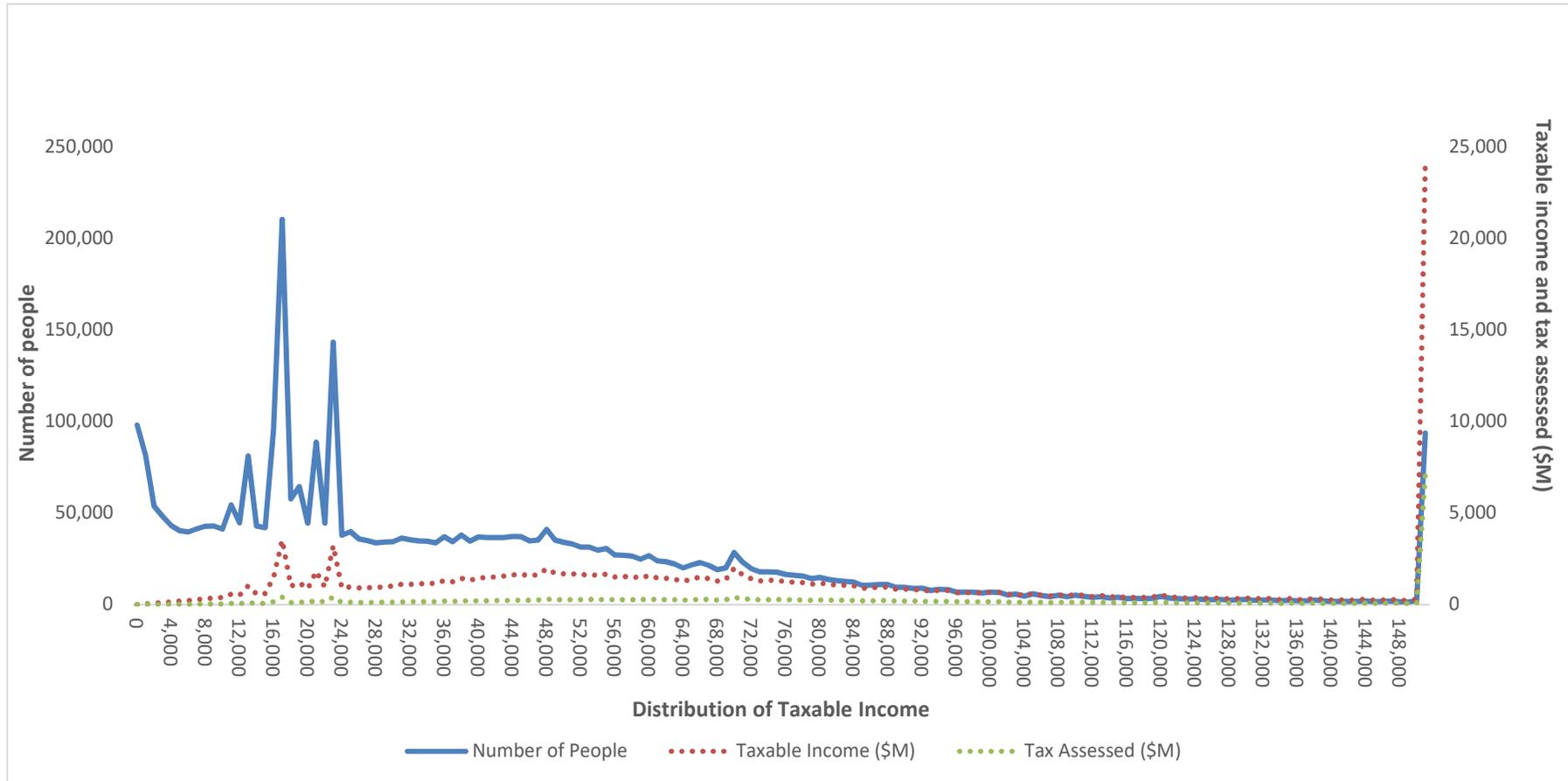
20. The application of these thresholds is illustrated in the following examples:

**Table 3: Examples**

Income	Current tax	Average tax rate %
Josh \$38,000	\$5,670 (\$5,150 if IETC claimed)	14.92% (13.55% if IETC claimed)
Greg \$60,000	\$11,020	18.37%
Alex \$120,000	\$30,520	25.43%

21. Figure 1 (on the next page) shows the distribution of taxable income (based on 2016 Inland Revenue data). The spikes indicate taxable transfers, where multiple individuals have the same level of taxable income.

Figure 1: Distribution of Taxable Income, 2016<sup>2</sup>



<sup>2</sup> Source: IRD website Income distributions of individual customers 2001 to 2016. The data is based on aggregate taxable income and income tax for people in each income band. The income and tax information is derived from IR3 tax returns, personal tax summaries, and employer PAYE information. For people who are non-filers, taxable income is assumed to be their total PAYE gross earnings in the year ended 31 March. PAYE gross earnings can include income from employment, and also taxable welfare benefits, New Zealand Super, earnings-related ACC, student allowances, and paid parental leave.

22. The table below shows the number of people earning within the current tax thresholds:

**Table 4: Current tax thresholds**

<b>Income (\$)</b>	<b>Number of people (2017)</b>	<b>Percentage %</b>
0-14,000	786,190 <sup>3</sup>	20.8%
14,001-48,000	1,719,910	45.6%
48,001-70,000	611,870	16.2%
Over 70,000	654,950	17.4%

23. Roughly two-thirds of taxpayers have incomes below \$48,000 and are on the bottom two marginal tax rates. From those with income between \$0 and \$14,000, 350,000 people had income between \$7,000 and \$14,000. Some of these will, however, be individuals who may not be in long-term hardship (for example children and students).

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<sup>3</sup> This includes 98,000 people on nil income, People with negative income because of losses are recorded as having nil taxable income in the tables.

### 3. Evaluation criteria

#### 3.1 Criteria for analysis

24. Some key considerations for evaluating the potential options are: efficiency, equity, revenue costs, administrative and compliance impacts and overall effect on the integrity of the tax system.

- *Efficiency* – evaluating efficiency involves consideration of how taxation distorts incentives to work and to accumulate physical and human capital. These distortions depend of the effective marginal tax rate (EMTR) faced by the individual. Normally, a higher EMTR leads to a disproportionate increase in the distortion in activity. This EMTR does not solely depend on the tax system, but also the way the individual interacts with the transfer system. High EMTRs create a disincentive to work and will have flow on impacts through to work/saving/investment decisions. Lowering the tax rate for the lower tax thresholds will lower the EMTR for earners on lower incomes and thereby increase incentives for additional work for these individuals.
- *Equity* -understanding the distributional impacts of a proposal allows us to analyse how well the option will meet equity based objectives such as reducing income inequality and benefiting earners on the lower income end of the scale. As noted in previous advice to the Group, New Zealand’s tax and transfer system reduces inequality less than the Organisation for Economic Cooperation and Development (OECD) average, and there is higher income inequality in New Zealand compared with the OECD average. However the bulk of redistribution in New Zealand occurs through transfers rather than tax. This is consistent with most other countries.
- *Revenue cost* – the options presented in this paper have been costed at approximately \$2 billion.
- *Compliance and administrative costs* – consideration of how easy it would be to comply with and to administer the proposed option.
- *Integrity of the tax system* – this considers whether the change fits into the tax system as a whole and if it impacts coherency of the tax system.

25. Any changes to the tax system will generally require trade-offs between the above criteria and the best-fit option will depend on value judgements about what should be achieved.

26. Where possible, we have also commented on the impact on the four capitals as described in the Treasury’s Living Standards Framework.

### 3.2 Income inequality measures

27. In addition to the considerations above, previous advice from the Treasury (2008)<sup>4</sup> on tax changes to address income inequality noted that the following judgements are required:

- *whether to focus on absolute or proportional reductions.* For example, ensuring that a very large proportion of taxpayers receive the same dollar value reduction in their taxes could be achieved by establishing a tax free zone, whereas ensuring that all taxpayers receive the same percentage reduction in tax paid could be achieved by reducing all tax rates, with lower tax rates reducing by less than higher rates.
- *whether to focus on all taxpayers or only those who cannot be reached directly by targeting.* Policies such as Working for Families, benefits, and superannuation can boost the incomes of particular groups, so a package could be focused on the remaining taxpayers rather than all taxpayers.
- *whether to focus on tax in isolation or in relation to other government policies.* A tax package can be situated as part of a portfolio of initiatives and inequality assessed across the portfolio, rather than on its own.
- *whether to focus on the individual or the household.* Tax lends itself most immediately to comparisons at the individual level, yet analysis at the household level is arguably more economically relevant.

### 3.3 Characteristics of low income taxpayers

28. In considering the best options, it is also important to understand more about the characteristics of low income taxpayers. A decomposition by individual and household characteristics shows that different groups of low-income taxpayers can be affected differently by various aspects of the tax-and-transfer system. As shown in Box 1 below, reforms involving tax-free zones may not be well targeted to help those most in need (Creedy et al., 2010).

#### Box 1: Characteristics of low income tax payers

The allocation of low income individuals to groups is sometimes used to identify if these groups are sensitive to tax policy changes. The table below gives a breakdown of individuals and groups of individuals that earn less than \$18,000 per annum.<sup>5</sup>

<sup>4</sup> The Treasury – illustrative options for personal tax reductions – T2008/456, 20 March 2008.

<sup>5</sup> Based on Household Economic Survey (HES) 2006/07.

<i>Category (all with taxable income &lt;\$18 000)</i>	<i>% of total</i>	<i>All/most (some) in this group</i>
1. New Zealand superannuation	20	A1
2. Core benefit recipient	19	A1
3. Self-employed	4	A2 (B)
4. Aged 15–17 years	10	A2
5. Student	13	A3 (A2)
6. Secondary earner; family taxable income >\$50 000	10	A2
7. Family eligible for Working for Families tax credits	5	A2
8. Aged 18–24 years (excludes students)	5	A3 (B)
9. Majority of income is from non-taxable sources	2	A2 (B)
10. Secondary earner; family taxable income <\$50 000	4	B (A3)
11. Primary earner	7	B (A3)
Total	100	–
Subtotals: <sup>a</sup>		
A1	39	–
A2	31	–
A3	19	–
B	11	–

*Note: (a) These subtotals use the subgroups in the right-hand column of the table, ignoring the subgroups in parentheses.*

Based on the analysis a tax-free zone may be a poorly targeted redistributive instrument for 89 per cent (sum A1 – A3) of individuals in this income category.<sup>6</sup>

The following excerpt explains A1, A2 and A3 characteristics.

*“A1 – disposable income is insensitive to tax changes at low income levels (for example, post-tax income is determined by a legislative formula).*

*A2 – Low-income individuals benefit from the income of others or individual taxable income is quite different from a welfare metric such as income per adult-equivalent person (for example, when individuals are members of a higher-income household)*

*A3 – Low taxable income is short-term only (for example, students).” (Creedy et al., 2010, p. 47).*

This is mainly because these individuals can be characterised as:

- Individuals receiving social welfare payments that are less affected by tax design at low-income levels (e.g. A1 superannuants and beneficiaries).<sup>7</sup>
- Individuals relying on other economic or disposable income (e.g. A2: self-employed, recipients of FTCs, secondary earners and 15–17 year-olds).
- Those likely to have temporarily low taxable income (e.g. A3: 24 year-olds and students).

In addition, tax changes which reduce tax paid on benefit income are compensated by an equivalent change in gross benefit payments to leave after-tax benefit payments unchanged. As a result, income tax changes are therefore viewed as a poor instrument to target core benefit recipients.

Lastly when examining the data at a household level, most households affected are in higher income ranges (i.e. \$30,000 - \$70,000).

29. The Treasury undertook analysis on tax rate and threshold change design options in preparation for Budget 2008. The work suggested that the personal tax system has limitations in that it can only moderately influence income inequality. The work also found low taxable income can often be a poor proxy for those on persistently low

<sup>6</sup> The analysis also found that only around 11 per cent of low-income individuals might benefit from a tax cut on low incomes, such as a tax-free zone, compared to other policy options.

<sup>7</sup> Tax changes affecting those at low incomes only affect New Zealand Superannuation recipients in the short term due to the NZ Super formula-based adjustment. However some of the core benefit rates are set in legislation net-of-tax.

household incomes. In addition it was also suggested that a focus on households rather than individuals gives a better sense of impacts on most taxpayers' wellbeing.

## 4. Options

30. This chapter considers three options within the scope of the personal income tax system that could be used to achieve the various objectives stated above. Those options are:

- changes to tax rates;
- changes to tax thresholds (including a tax-free threshold); and
- the use of tax credits.

31. Changes to tax rate and tax thresholds have similar impacts on equity and efficiency outcomes. The effects of these options are discussed together and then comparisons provided for the numbers of people affected by each option and any differences in expected distributional outcomes.

### 4.1 Changes to tax rates or tax thresholds

32. The following tables illustrate the options for changing tax rates and tax thresholds, alongside illustrative examples for how these changes would flow through to individuals (see Appendix A for indicative examples at the household level).

33. The options presented for each category have been initially costed at approximately \$2 billion per annum (this costing does not include costs involved if the net benefit is also provided to recipients of social welfare payments).

**Table 5: Options for tax rate (I)**

Income tax scale	Option 1A	Option 1B	Option 1C
0 - \$14,000	<b>5.25</b>	10.5	10.5
\$14,001 - \$48,000	17.5	<b>14.75</b>	17.5
\$48,001 – \$70,000	30	30	<b>22.5</b>
\$70,001 +	33	33	33

**Table 6: Changes to tax rates - examples**

Income	Current tax	Option 1A	Option 1B	Option 1C
Josh \$38,000	\$5,670	\$4935 (\$735 less tax)	\$5,010 (\$660 less tax)	\$5670 (\$- same tax)
Greg \$60,000	\$11,020	\$10,285 (\$735 less tax)	\$10,085 (\$935 less tax)	\$10,120 (\$900 less tax)
Alex \$120,000	\$30,520	\$29,785 (\$735 less tax)	\$29,585 (\$935 less tax)	\$28,870 (\$1,650 less tax)

34. A second approach is to change tax thresholds rather than tax rates, for example, providing a tax free threshold of \$7,000 or shifting the first income bracket up to \$26,000.

**Table 7: Options for tax thresholds (2)**

Income tax rate	Option 2A	Option 2B	Option 2C
10.5%	0-\$26,000	0-\$14,000	\$7,000 - \$14,000 (0 -\$7,000 tax free)
17.5%	\$26,001 - \$48,000	\$14,001 - \$59,000	\$14,001 - \$48,000
30%	\$48,001 - \$70,000	\$59,001 - \$70,000	\$48,001 - \$70,000
33%	\$70,001	\$70,001	\$70,001

**Table 8: Changes to thresholds - examples**

Income	Current tax	Option 2A	Option 2B	Option 2C
Josh \$38,000	\$5,670	\$4,830 (840 less tax)	\$5,670 (- same tax)	\$4,935 (735 less tax)
Greg \$60,000	\$11,020	\$10,180 (840 less tax)	\$9,645 (1375 less tax)	\$10,285 (735 less tax)
Alex \$120,000	\$30,520	\$29,680 (840 less tax)	\$29,145 (1375 less tax)	\$28,035 (735 less tax)

***Distributional analysis and equity considerations***

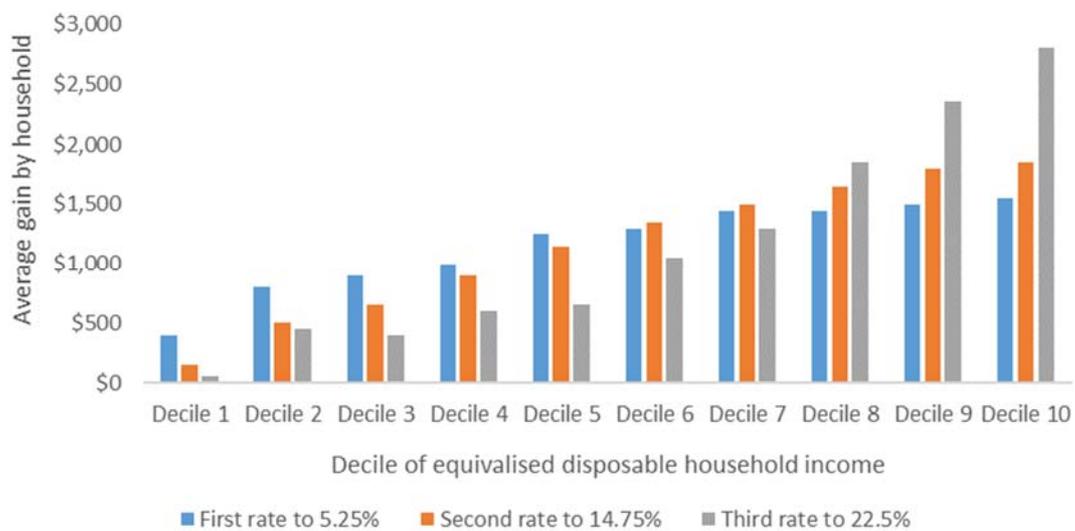
35. If society is concerned about inequality, a more progressive tax system is generally considered to be positive for the accumulation of social capital, as it helps to reduce income inequality and enhance social connections and increase social capital.
36. Any cuts to tax rates will benefit all individuals being taxed at that marginal rate as well as those with higher incomes. The maximum benefit will go to those earning at the ceiling of the relevant threshold or above. Similarly, any increase in a threshold will benefit those earning between the new and old threshold as well as those earning more with the full benefit going to those earning at the level of the new threshold or above.
37. Option 1A, reducing the first rate, would affect all income earners. Option 1B, a reduction to the second rate, would impact most earners. However 800,000 people earn below \$14,000, and they would not be affected by this option. Option 1C would reduce the third rate only and therefore would not provide a tax cut to 2.5 million people (about two-thirds of taxpayers).
38. An individual earning the minimum wage for 35 hours a week equates to \$30,030 yearly. They would pay \$735 less tax under Option 1A, and \$440 less tax under Option 1B. They would not benefit under Option 1C.
39. Option 2A, increasing the first thresholds, would affect all people earning upwards of \$14,000 per annum. Approximately 800,000<sup>8</sup> of the lowest earners would not benefit from this change. Although, as was pointed out earlier, not all in this group are necessarily in hardship. Option 2B would decrease tax paid for all individuals earning upwards of \$48,000 (like option 1C it would not provide a tax cut for 2.5 million people). A tax-free threshold would benefit all earners.

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<sup>8</sup> This includes 98,000 people on nil income.

40. An individual earning minimum wage would pay \$735 less tax under Option 2C, and \$840 less tax under Option 2A. They would not benefit under Option 2B.
41. Figure 2 illustrates the average gain by disposable household income decile (equivalised) as a result of changes to tax rates. Understanding the impact of the proposed changes by decile allows for analysis of the impact on households depending on their socio-economic circumstances. These deciles have been ranked by equivalised disposable household income e.g., households in decile 1 are in the lowest ten percent of income-earning households in New Zealand, decile 2 the next lowest ten percent.

**Figure 2: Average annual benefit of rate reduction by household (2015/16), excluding changes to benefits<sup>9</sup>**

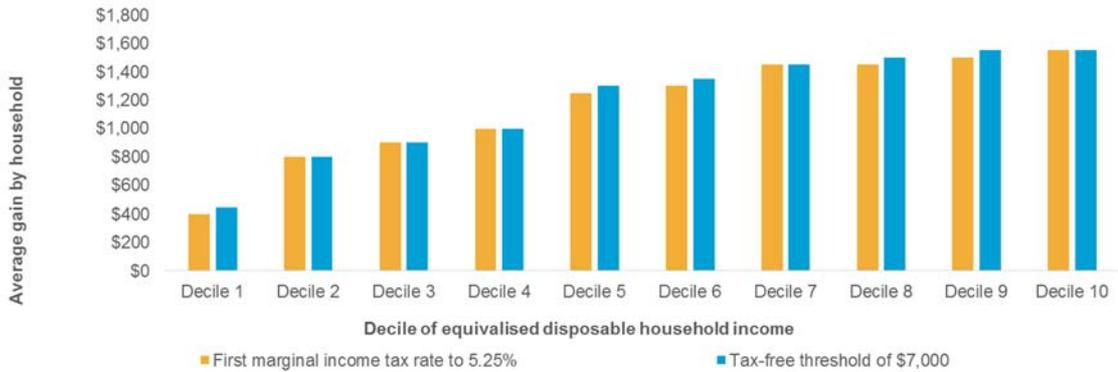


42. The graph reinforces the importance of focusing on the first two income rates/thresholds to provide benefits to lower income households, as they provide larger impacts to household income for all deciles up to and including decile 7.

<sup>9</sup> Source: The Treasury. Estimated using Treasury’s micro-simulation model of the tax and welfare system.

43. Figure 3 illustrates that similar results are found for distributional outcomes for a tax cut in the first income tax rate and a tax free threshold.

**Figure 3: Comparison of decrease in first rate and tax free threshold, 2015/16<sup>10</sup>**



44. Of the various options discussed above, an increase in the \$48,000 threshold and a decrease in the third marginal tax rate (30%) would not provide any benefit to roughly two-thirds of taxpayers. For this reason we focus on the other four options below.

45. The following comparisons can be made between the options in regards to the number of people affected and how the benefits from tax changes affect different income levels.

46. In general, options for changes to the bottom two tax thresholds affect the highest number of individuals. Table 9 estimates the number of individuals who would receive some or all of the benefit for each change.

**Table 9: Estimated numbers of taxpayers who gain by option<sup>11</sup>**

Option	Max gain per person	Est. number who gain	Est. number who gain full amount	Income where full gain achieved
Tax free threshold	\$735	3.7 million	3.3 million	\$7,000
Decrease 10.5% rate	\$735	3.7 million	3.0 million	\$14,000
Increase threshold to 26,000	\$840	3.0 million	2.1 million	\$26,000
Decrease 17.5% rate	\$935	3.0 million	1.3 million	\$48,000

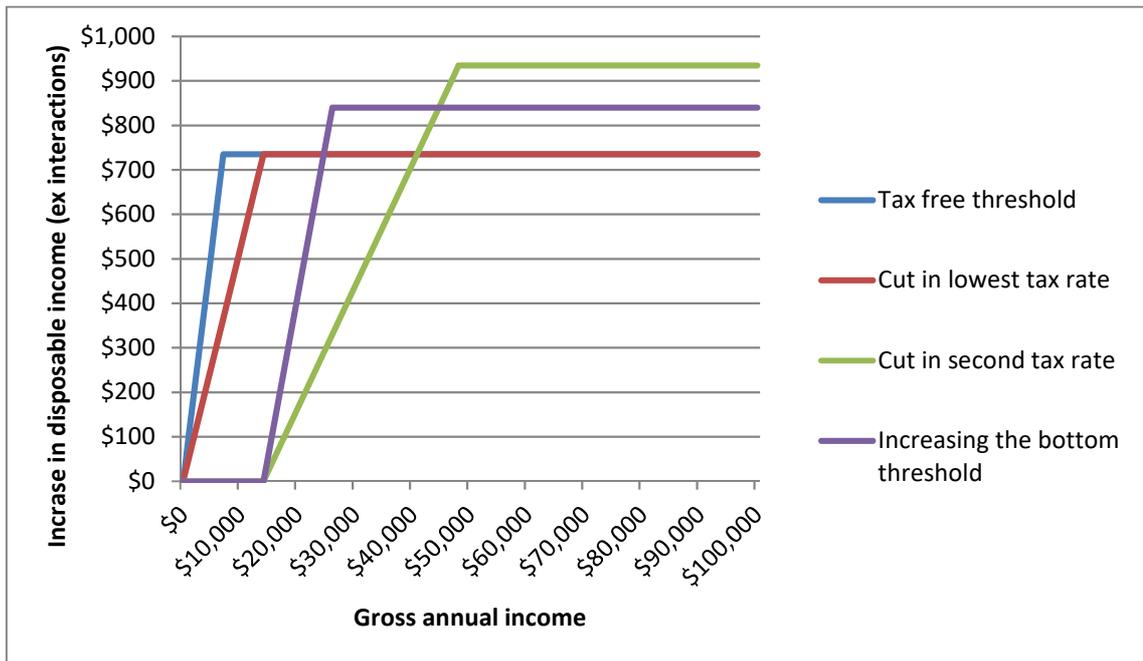
47. Figure 4 further illustrates how the different options<sup>12</sup> would affect levels of income. This illustrates the points where an individual would see an increase in net income.

<sup>10</sup> Source: The Treasury. Estimated using Treasury’s micro-simulation model of the tax and welfare system

<sup>11</sup> Estimated numbers are based on 2017 data, and rounded to the nearest 100,000.

<sup>12</sup> This is based on hypothetical tax scale applied to arbitrary income levels, and no interaction with the benefit or tax system is included.

**Figure 4: Effect of tax rate and threshold changes**



### *Efficiency*

48. The efficiency consequences of a tax rate cut can be considered in terms of the change in labour supply incentives, and the change in incentives to accumulate physical, financial, and human capital.
49. The efficiency benefit in terms of labour supply effects depends on the EMTR faced by individuals. Efficiency costs increase disproportionately with EMTRs<sup>13</sup>.
50. A reduction in the lowest tax rate will decrease the EMTR for earners within that band, and also reduce the average tax rate (ATR) for all the bands above it. The lower EMTR will improve efficiency by reducing the tax wedge (the distortion in decisions brought about by tax), while the lower ATR for all groups (including high income earners) above that band creates a fiscal cost. As a result the lower the income band where rates are cut the more expensive the gains from efficiency (through lower EMTRs) are.
51. A reduction in the lowest tax rate will lower the EMTR for earners in this band. This may encourage them to work longer hours. Perhaps more importantly, tax cuts at the bottom can lower average tax rates on those considering whether or not to join the labour force. By making work more attractive, this can increase participation in the labour force. At the same time the benefit will also extend to those on higher incomes and this can in some cases result in those on higher tax rates working fewer hours. Thus, the overall impact on hours worked is uncertain.

<sup>13</sup> EMTRs are also affected by the abatement rules for social assistance payments such as Working for Families or MSD administered payments such as Jobseeker support. For example, abatement for Working for Families entitlements currently begins at \$42,700.

52. In addition, changes to the tax rate can affect the incentives to accumulate financial and physical and human capital. The weight of evidence suggests that income taxes affect behaviour in ways that reduce investment in skills, risk taking, and the accumulation of capital. These influences reduce productivity and growth. Evidence points to small but non-trivial reductions in productivity from higher average tax rates<sup>14</sup>.
53. Higher income earners will also benefit from reductions in the first and second tax rate. This is seen by way of individual example, by looking at the distribution graphs for households, and through the graph illustrating the effect of tax rate and threshold changes on income (figure 4).
54. Reducing the lower tax rate will decrease average tax rates across the board, increasing the return for building up human capital. However, it may influence decisions regarding accumulation of human capital by increasing the opportunity cost of investing in higher skillsets (through an increase to the net income from working at lower wage rates).
55. The changes to tax thresholds influence efficiency results in the same way changes in tax rates do. They reduce the marginal tax rate for a group of individuals. As a result, it is the change in EMTRs across the income distribution, and the number of individuals whose choices will be influenced by these changes, which is relevant for evaluating the incentive effects.
56. A tax-free threshold would lower EMTRs by 10.5 percentage points for the 11.6% of taxpayers earning between \$0 and \$7,000. Dropping the bottom marginal tax rate would reduce EMTRs by 5.25 percentage points for the 20.8% of taxpayers earning less than \$14,000. Increasing the first threshold would reduce EMTRs by 7 percentage points for the 24.3% of taxpayers earning between \$14,000 and \$26,000. Dropping the second marginal tax rate would drop EMTRs by 2.75 percentage points for the 45.6% of taxpayers earning between \$14,000 and \$46,000.
57. Based on the analysis above, therefore, an important question is what further information does the Group want from officials to help it decide between the various options.
58. This paper focuses on the changes to tax thresholds which have been costed at approximately \$2 billion. Further consideration could be given designing tax threshold changes which also provide benefits to making the tax system simpler for people in otherwise more complex situations. This could be designed in a way to help mitigate the crossing of tax thresholds for certain individuals with two sources of income, for example individuals earning Jobseeker Support and working part time. The way to do this would be to set the thresholds at key cut-off points taking into account the benefit system. If designed this way, this could mitigate the need for individuals to seek special tax codes<sup>15</sup> and smooth out tax withheld from secondary income sources.

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<sup>14</sup> <https://www.victoria.ac.nz/sacl/about/cpf/publications?a=177146>

<sup>15</sup> Legislation currently being considered by the Finance and Expenditure Committee includes changes to the administration of individuals income tax, including moving from special tax codes to tailored tax codes.

#### 4.1 Tax credits with abatements

59. Another option that could be considered is the use of a tax credit. Examples of tax credits currently used are Working for Families Tax Credits, and the Independent Earners Tax Credit (IETC). Consideration of the Working for Families Tax Credit is outside of the terms of reference. However, consideration could be given to expanding, or altering the current IETC, or introducing a new low income credit.
60. The IETC currently provides \$10 per week (\$520 per year) to individuals earning between \$24,000 and \$44,000 who do not receive Working for Families or other social welfare entitlements. The IETC abates at a rate of 13 cents for every dollar of income over \$44,000, meaning it is fully abated at \$48,000.
61. The IETC currently provides \$10 per week (\$520 per year) to individuals earning between \$24,000 and \$44,000 who do not receive Working for Families or other social welfare entitlements. The IETC abates at a rate of 13 cents for every dollar of income over \$44,000, meaning it is fully abated at \$48,000. In the examples provided above at paragraphs 33 and 34 only Josh would benefit from a tax credit which abates at \$48,000. If the tax credit had the same characteristics as the IETC but was increased in value to be \$1,020 per year, he would pay this amount less in tax for the year (equating to a \$20 saving per week).
62. If the Group wants to provide a tax cut to those on low incomes, without that tax cut benefiting high income earners, this option could be considered. This option would achieve the same result as lowering one of the lower marginal rates, and increasing one of the higher marginal rates to ensure that the benefit that is received by those on lower incomes is effectively “clawed back” by the higher tax rate for those on higher incomes. Doing this directly through tax rate changes would increase marginal tax rates for some but would not increase the total amount of tax that anyone pays.
63. For example, say the Group wants to increase the lowest threshold (from its current \$14,000) so that those who are earning in the lower end of the second bracket (\$14,000 to \$48,000) receive a tax cut of a maximum of \$1,000, but that by the time the third threshold comes in (\$48,000), the tax cut no longer applies. This sort of system would limit the benefit to those earning a bit below the median wage, and those earning the median wage would get no benefit (median wage is approximately \$51,000).
64. The following tax structure achieves that result:

**Table 10: Example tax structure**

Thresholds		Tax rate
\$0 -	\$28 285	10.5%
\$28 286 -	\$48 000	22.6%
\$48 001 -	\$70 000	30%
\$70 001 -		33%

65. The same effect can be achieved by keeping the existing rate structure and introducing an abating tax credit. The existing structure is:

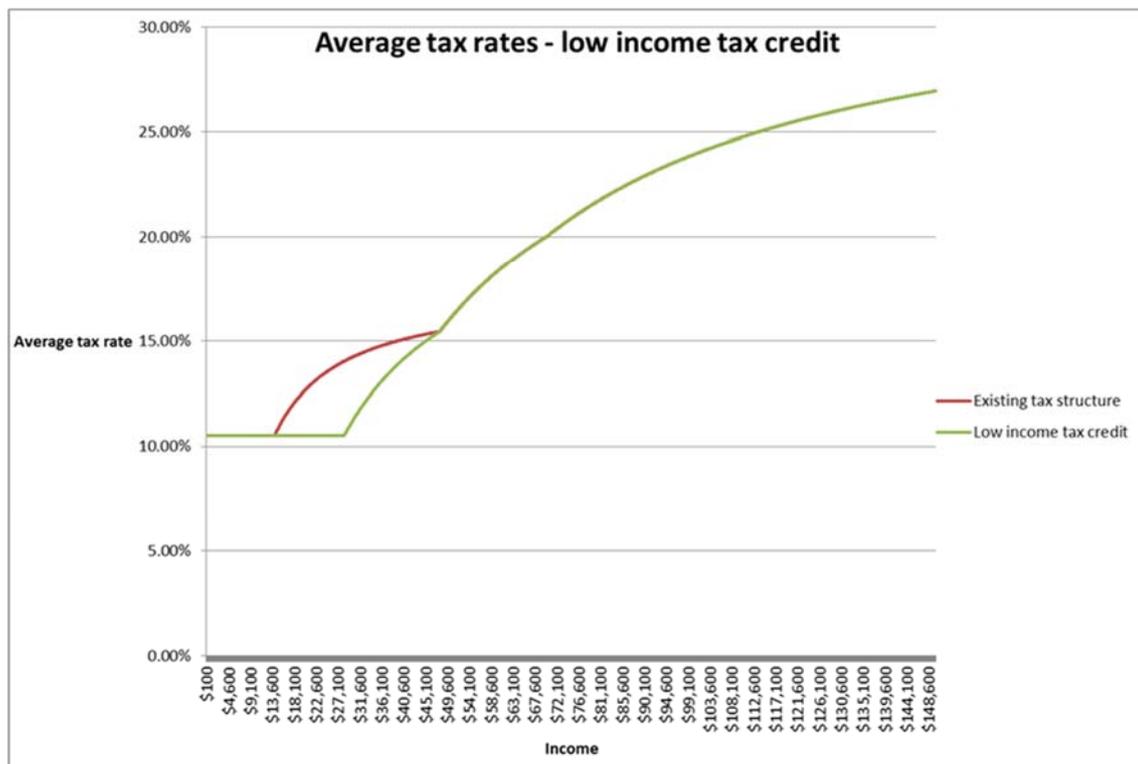
**Table 11: Existing tax structure**

Thresholds		Tax rate
\$0 -	\$14 000	10.5%
\$14 001 -	\$48 000	17.5%
\$48 001 -	\$70 000	30%
\$70 001 -		33%

66. The tax credit would be \$1,000 for anyone earning over \$14,000, abating at 5.1% from the first dollar.

67. Figure 5 below illustrates the average tax rates by income that are created with the low income tax credit.

**Figure 5: Average tax rates – low income tax credit**



68. This approach is likely to be more progressive than changes to the tax rates or thresholds, as it limits the benefits of the tax reduction to those in the identified target zone. At the same time, it would be pushing up EMTRs in the range where the credit is abating.

69. If the Group wants further analysis of this type of option, the Secretariat could report back in a later meeting, but would need guidance on:

- What sort of groups the Group want to provide a tax cut for?
- What sort of income level the Group do not want the tax cut to apply to?

- The amount of tax cut (on a per person basis).

#### 4.2 Interaction with social assistance payments

70. While the average benefits from decreasing the lower tax rates and thresholds for lower income tax brackets make a difference in the incomes for these targeted groups, changes to income tax rates and thresholds have impacts on the level of entitlements for some welfare recipients. Assuming current welfare policies are unchanged, then the following impacts should be noted:

- Some social welfare payments (e.g. jobseeker support, sole parent and supported living) are set at a level that ensures the benefit recipients receive a given amount after tax. While the gross benefit amount will reduce with a change in tax, the net amount the person will receive should not change. To provide the same benefits from a decrease in effective tax rates to those individuals receiving social welfare payments, an additional increase to the net amount of a benefit would need to be made.
- NZ Superannuation and veterans pension rates are set on a gross basis, and therefore recipients will benefit directly from a reduction in tax rates and thresholds.

**Table 12: Recipients of main social assistance (as at 31 March 2018)**

Type	Number
Jobseeker support	118,755
Sole parent support	58,830
Supported living payment	92,473

71. The amount of support received depends on the individual's circumstances.

72. The following example illustrates the difference between an individual who receives Jobseeker Support and a second individual who earns the same amount from employment income. A single person, aged over 25 years would receive Jobseeker Support of \$215.34 per week after tax (\$240.60 gross).<sup>16</sup>

**Table 13: Jobseeker support example<sup>17</sup>**

Individual	Current Net Income	Option 1A (10.5% cut to 5.25%)
Wage earner	\$11,197.68	\$11,854.17
Recipient of Jobseeker support	\$11,197.68	\$11,197.68

<sup>16</sup> Rates for Jobseeker Support depend on circumstances, <https://www.workandincome.govt.nz/products/benefit-rates/benefit-rates-april-2018.html>

<sup>17</sup> This example relates to a single person, aged over 25 years and receiving only Jobseeker Support. The examples do not include non-tax deductions. It also doesn't take any other social assistance payments the individual may be eligible for, e.g., accommodation support payments.

73. Provided an individual is earning income from other sources (in addition to or instead of receiving certain assistance payment) lowest income individuals will have increased after-tax income from a reduction in the lowest tax rates applied to this income.
74. In this example, the recipient of Jobseeker Support would require an increase in their support payment of \$656.49 per annum (\$12.60 per week) in order to receive the same increase in after-tax income as someone who currently earns the same gross amount as the Jobseeker support payment.
75. A sole parent receiving the Sole Parent Support payment may also be contrasted with a wage earner with a yearly income of \$19,867, or \$382.07 per week before tax. As shown in table 14 below, the wage earner would receive benefits from a tax cut to the lowest rate which result in an after tax income of \$18,105, which is \$735 additional net income per annum (\$14 per week). Option 1C is not included in the below table, as it would not change the tax outcome for either individual.

**Table 14: Sole parent support example**

<b>Individual</b>	<b>Current Net Income</b>	<b>Option 1A (10.5% cut to 5.25%)</b>	<b>Option 1B (17.5% cut to 14.75%)</b>
Wage earner	\$17,370	\$18,105	\$17,532
Recipient of Sole parent support	\$17,370	\$17,370	\$17,370

### 4.3 Constraints in analysis

76. The quantitative analysis in this paper is preliminary work which has not fully integrated the impacts on beneficiaries, and does not yet incorporate EMTR analysis. Further direction from the Group on options that it is interested in will assist in narrowing down options for further analysis.

## 5. Conclusion

### 5.1 Concluding thoughts and discussion

77. To provide benefits to individuals on lower incomes, either the first or the second tax rate (or threshold) needs to be targeted. The key advantage to lowering the second tax rate is that this also affects a zone where families are receiving assistance such as Working for Families tax credits, causing households to face high EMTRs.
78. If the concern is low incomes received by individuals, a tax-free threshold or a reduction to the lowest tax rate might appear to be the preferred options as approximately a fifth of taxpayers don't exceed the \$14,000 threshold. However, within this range are some including students and children who might not be a key target of concern.
79. Such a change could reduce tax rates for some who are on very high EMTRs, which would reduce poverty traps and increase productivity. However the impact of this may be limited relative to the significant impact of welfare abatements on high EMTRs. Some welfare abatements would also increase to match any income tax reduction, for example where they guarantee a specific minimum income.
80. Reductions to lower rates are unlikely to be the most cost-effective way of targeting low-income households, given that such a policy would also be paying to deliver higher net incomes to high income earners. An alternative is an abating credit, but this has the disadvantaging of increasing EMTR over the range that the credit is abating.
81. In order to provide the same increases in income to households receiving social assistance, so that the tax reduction benefits "flow through" to benefits, the payment rates for these benefits would need to be increased. Analysis on the additional cost of increasing these benefits, and its effect on households, has not been concluded, but would be considered as part of further work, if directed. Indicative preliminary costings are provided in Appendix C.
82. The efficiency impacts illustrate that any changes to the tax system should not be viewed in isolation from the transfers system. Rates of social welfare payment and their abatement have significant impacts on EMTRs for low income individuals and families due to their eligibility for transfer payments.
83. If changes to the tax rates or tax thresholds are made, consideration should be given to the impact on other tax rates such as prescribed income rates (PIRs), fringe benefit tax (FBT), employer superannuation contribution tax (ESCT) and their relationship to the personal income tax scale.
84. This paper should be considered in conjunction with the *Potential revenue-neutral packages* paper.

## 5.2 Further analysis

85. Further analysis on the Groups preferred option(s) would identify:

- Detailed distributional effects.
- Impacts of EMTRs.
- Costings of equivalent increases if tax reductions are also provided to recipients of social welfare payments.
- How it could be scaled for a given level of revenue.

## Appendix A: Examples

### Further examples on a household basis

- The following examples give an indication of the impact of certain tax rate and threshold changes on a variety of household types. The examples in the body of the paper refer to impacts on individuals.

**Table 16: Illustrative scenarios**

Example household	Annual household wage and salary income	Weekly benefit (\$) per household		
		Tax free zone of \$7000	Lowest tax rate reduced from 10.5% to 5.25%	Increase bottom threshold from \$14,000 to \$26,000
Sole parent receiving Jobseeker Support	N/A	\$0	\$0	\$0
Single earner on minimum wage – 20 hours p/week	\$17,000	\$14	\$14	\$4
Single earner on minimum wage working full time	\$34,000	\$14	\$14	\$16
Single earner on full time median wage	\$52,000	\$14	\$14	\$16
Two earners: 1 person working full time on median wage and one person working 20 hours per week on minimum wage	\$69,000	\$28	\$28	\$20
Two earners working full time on median wage	\$104,000	\$28	\$28	\$32
One full time earner on \$150,000 per annum and one earner who works for 5 hours per week on median wage	\$157,000	\$28	\$21	\$16

Note: Assumes minimum wage of \$16.50 per hour and median wage of \$25.00 per hour, based on data as at June quarter 2018. Annual incomes have been rounded to nearest thousand.

## Appendix B: Social policy impacts

**Table 17: How an income tax change would flow through to social assistance and existing tax credits**

Payment	Is eligibility tax contingent	Is the method of how the payment amount is calculated tax contingent	Is the payment taxable?	Would tax changes affect the payment?
<b>Family Tax Credit (FTC)</b>	<b>No</b> – eligibility is based on family scheme income and the number of children.	<b>No</b> – the amount is calculated irrespective of tax rates and thresholds	<b>No</b> – the payment is excluded income under section MA 3 of the Income Tax Act 2007 (ITA)	<b>No</b>
<b>Minimum Family Tax Credit (MFTC)</b>	<b>No</b> – eligibility is based on family scheme income and work requirements	<b>No</b> – the calculation depends on net Jobseeker Support couple with dependent rate, inflation rate, and benefit abatement rules.	<b>No</b> – the payment is excluded income under section MA 3 of the ITA	<b>In some cases -</b> A tax rate change could affect an individual's entitlement to MFTC as their net income from salary and wages will increase due to decreased tax.
<b>In-work tax credit</b>	<b>No</b> – eligibility is based on family scheme income and work requirements	<b>No</b> – the amount is calculated irrespective of tax rates and thresholds	<b>No</b> – the payment is excluded income under section MA 3 of the ITA	<b>No</b>
<b>Best Start Tax Credit (Child's first year)</b>	<b>No</b> – eligibility is based on family scheme income and number of children.	<b>No</b> – the amount is calculated irrespective of tax rates and thresholds	<b>No</b> – the payment is excluded income under section MA 3 of the ITA.	<b>No</b>
<b>Best Start Tax Credit (Child's second and third year)</b>	<b>No</b> – eligibility is based on family scheme income and number of children	<b>No</b> – the amount is calculated irrespective of tax rates and thresholds.	<b>No</b> – the payment is excluded income under section MA 3	<b>No</b>
<b>Independent Earner Tax Credit (IETC)</b>	<b>No</b> – eligibility is based on net income	<b>No</b> – the amount is calculated irrespective of tax rates and thresholds.	<b>No</b>	<b>No</b>
<b>Paid Parental Leave (PPL)</b>	<b>No</b> – eligibility is based on net income and work requirements.	<b>No</b> – the amount is based on the recipients average weekly income up to a maximum (currently \$564.38 per week)	<b>Yes</b> – the payment is taxable income	<b>Yes</b> – a reduction in the bottom tax rate would increase net amount received.

Payment	Is eligibility tax contingent	Is the method of how the payment amount is calculated tax contingent	Is the payment taxable?	Would tax changes affect the payment?
<b>Winter Energy Payment</b>	<b>No</b> - eligibility- is whether the person is on a qualifying benefit	<b>No</b> – the amount is calculated irrespective of tax rates and thresholds.	<b>No</b> – the payment is exempt income	<b>No</b>
<b>Main benefits</b>	<b>No</b> – eligibility varies but the income test is based on net income.	<b>No</b> – the amount is calculated on a net basis and is therefore irrespective of tax rates and thresholds.	<b>Yes</b> – the payment is taxable income	<b>No</b> – the rate at which main benefits are paid at is calculated on an after-tax basis. However, as main benefits are taxable income, a reduction in the bottom tax rate would increase the after-tax amount beneficiaries received from other income.
<b>Accommodation Supplement, Temporary Additional Support</b>	<b>No</b> – eligibility varies, the income test is based on net income.	<b>No</b> - the amount is calculated irrespective of tax rates and thresholds.	<b>No</b> – the payment is exempt income	<b>No</b>
<b>NZ Superannuation</b>	<b>No</b> – eligibility is based on age. Eligibility for non-qualified partner rates is based on net income.	<b>No</b> – the amount is based on average weekly income (after the deduction of standard tax)	<b>Yes</b> – the payment is taxable income.	<b>Yes</b> – the payment is taxable income and therefore a reduction in the bottom tax rate would increase the after tax amount received by recipients.

Notes:

- “Net income” is a term used in the Income Tax Act 2007 and refers to the annual gross income of a person minus their annual deductions.
- “Family scheme income” is net income, as defined, adjusted to reflect a family’s ability to meet day-to-day living expenses.
- “Net basis” refers to an amount after tax i.e. the amount in the hands of the recipient after all deductions including tax. This is distinguishable from “gross basis” which is an amount before tax.

## Appendix C: Fiscal cost of extending the tax benefit to benefit recipients

The following table gives indicative fiscal costs related to the extension of benefits due to tax cuts and/or threshold change to main benefit recipients (income tested benefits). These estimates make use of various simplified assumptions, and should be interpreted with caution.

Further, more detailed fiscal costings can be provided to the Group at a later stage.

**Table 18: preliminary costings for benefits**

Income tested benefit (Main benefit)	Tax free threshold of \$7,000	Reduction in the bottom tax rate from 10.5% to 5.25%	Increase first threshold to \$26,000	Reduce second rate to 14.75%
Jobseeker support <sup>(1)</sup>	\$87 million	\$52 million	\$0 million	\$0 million
Sole parent Support <sup>(2)</sup>	\$43 million	\$43 million	\$24 million	\$6 million
Supported living payment <sup>(3)</sup>	\$68 million	\$61 million	\$0 million	\$0 million
Young parent payment & youth payment <sup>(4)</sup>	\$2 million	2 million	\$0 million	\$0 million
<b>Total</b>	\$200 million	\$158 million	\$24 million	\$6 million

<sup>(1)</sup> Income equivalent to single job seeker, aged between 18 and 19 years, stays at home, with net weekly benefit of \$143.55.

<sup>(2)</sup> Income equivalent to sole parent with net weekly benefit of \$334.05.

<sup>(3)</sup> Income equivalent to single aged between 16 and 17, with net weekly benefit of \$217.80.

<sup>(4)</sup> Income equivalent to young parent, aged between 16 and 17, living with parents, with net weekly benefit of \$169.17.

Notes:

- Each income tested benefit (apart from sole parent support) consists of various categories with varying net benefits, and some abating at different rates. For the purpose of this analysis, income earned is equivalent to the entry (lowest) category for each benefit.
- All estimates are based on a set net income / benefit, with zero abatement.
- All benefit rates are based on the latest available rates by the Ministry for Social Development (MSD).<sup>18</sup>
- Total cost is derived by multiplying the total amount of benefit recipients per benefit<sup>19</sup> by the cost associated with each chosen category / tax change.

<sup>18</sup> <https://www.workandincome.govt.nz/online-services/mymisd/index.html>

<sup>19</sup> As at 01/07/2018.

- Changing the net benefit rates has flow on effects in terms of Accommodation Supplement (AS) payments. The entry and abatement thresholds for the AS payments are tied to benefit rates, so in general low income earners receiving AS will get less (as the entry threshold is pushed up) while higher income earners receiving AS will get more (as the abatement threshold is pushed out). On aggregate the change in spending on AS is likely to be negative (i.e., total spending on AS will decrease).

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