

Tax cuts or spending: What is the most effective stimulus?

Bringing forward stage 2 of the tax cuts is ineffective stimulus. Up to 12 times as many jobs could be created if an equivalent amount of money was spent on labour intensive industries

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INTRODUCTION

The government is considering bringing forward tax cuts to help stimulate the economy.¹ These could be announced in the Federal Budget in October. The Treasurer has claimed that this will help stimulate the economy by putting more money in consumers' pockets. This will in turn increase spending creating more demand, more production and more employment.

The ultimate way to measure the success of any stimulus project is by how much additional employment it creates. This paper will estimate the additional employment that bringing forward stage 2 of the tax cuts to 2021-22 might create. It will then be compared to spending the same amount of money on employment intensive industries. This is done to judge how effective bringing forward the tax cuts might be as stimulus.

¹ Crowe D (2020) 'Trickle-down fantasy': Stimulus tax cuts face fresh attack as \$28b cost revealed, SMH, 27 July, available at <<https://www.smh.com.au/politics/federal/trickle-down-fantasy-stimulus-tax-cuts-face-fresh-attack-as-28b-cost-revealed-20200726-p55fiz.html>>

RESULTS

Stimulus is only effective if it is spent in the domestic economy. Income that is saved, used to buy imported goods or is used to pay taxes, such as the GST, are not used to increase domestic demand and employ more people. This paper will judge the effectiveness of these tax cuts as stimulus by calculating a range of additional employment that the tax cuts might create.

The estimated cost to the budget of bringing forward stage 2 of the tax cuts to 2021-22 is \$13 billion. In our alternative scenario we will spend an additional \$13 billion in other employment intensive industries to compare the effectiveness of bringing forward the tax cuts as stimulus.

Our calculations show that bringing forward the tax cuts will create between 13,400 and 23,300 additional jobs depending on how much of the tax cuts is spent on domestic goods and services. Using our best estimates for how much is saved, how much is spent on imported goods and services and how much is spent on indirect taxes like the GST, we calculate a figure of 13,400. If we assume no saving, no imports and no indirect taxes we get a job creation figure of 23,300. The actual job creation figure is likely to be much closer to 13,400 than 23,300.

In our alternative scenario we split \$13 billion in additional spending equally between five employment intensive industries. These include:

- University education
- Childcare
- Healthcare
- Aged care
- Creative arts

In this scenario 161,900 jobs are created. This is shown in Table 1.

Table 1 – Estimates for additional direct jobs created from spending \$13 billion evenly split among five employment intensive industries

Employment intensive industries	Additional jobs
University education	21,900
Childcare	51,900
Healthcare	26,500
Aged care	38,400
Creative arts	23,400
Total	161,900

Source: Authors calculations

These industries were chosen because they have been heavily impacted by the pandemic and they employ large numbers of people for a given amount of revenue. There are other industries the government might instead choose, and the amount of additional funding can be split in many different ways.

What the results highlight is how much more effective funding of employment intensive industries is compared with tax cuts. The amount of additional employment is between seven and 12 times more if the money is directed at funding employment intensive industries.

This shows how ineffective tax cuts are at creating additional jobs, particularly tax cuts targeted at high income earners. The government would create more additional employment directly funding areas of need in employment intensive industries.

CALCULATING ADDITIONAL EMPLOYMENT FROM TAX CUTS

In order to work out how much additional employment a tax cut might create we need to calculate how much of the tax cut will add to domestic demand. This amount will be smaller than the total amount of the tax cut because of several leakages. These include:

- Savings made from the tax cut money
- Imports purchased with the tax cut money
- Indirect taxes (like the GST) paid from purchases made with the tax cut money

We will now discuss our estimates for each of these leakages.

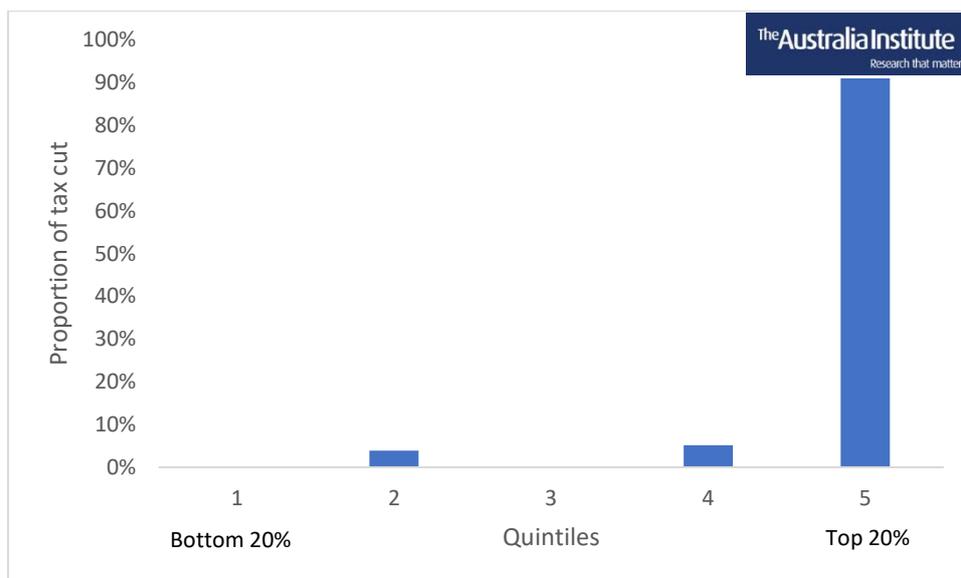
Savings

The rate of savings varies over the income distribution. Low income earners usually spend the entirety of their income because a larger proportion of their income is made up paying for the essential components like rent, food and utilities. High income earners have more discretion over spending because they have a larger capacity to pay. As people's income rises, they're more likely to save a larger proportion of their income.

To calculate how much of the tax cut might be saved we need estimates for how much of the tax cut people will receive by income and how much of it will be saved by income.

Previous Australia Institute analysis has shown that bringing forward stage 2 of the tax cuts to 2021-22 will mainly go to high income taxpayers.² This gives us estimates for the income distribution of the tax cut. The distribution of the tax cuts by quintile in in Figure 1.

Figure 1 – Distribution of bringing forward stage 2 of the tax cut to 2021-22 by income quintile



Source: Grudnoff M (2020) Early tax cuts as stimulus

A Reserve Bank of Australia Research Discussion Paper has also estimated savings ratios by quintile.³ Those savings rates for 2009-10 are shown in Table 2.

Table 2 – Estimates of savings ratios by income quintiles in 2009-10

Quintile	Savings ratio
1	-26%
2	-9%
3	1%
4	13%
5	26%

Source: Finlay R & Price F (2014) Household Savings in Australia

Using this data, we estimate that approximately 24 per cent of the tax cut is saved.

² Grudnoff M (2020) *Early tax cuts as stimulus*, The Australia Institute, 7 September, available at <<https://www.tai.org.au/content/early-tax-cuts-stimulus>>

³ Finlay R & Price F (2014) *Household Savings in Australia*, Research Discussion Paper, Reserve Bank of Australia, available at <<https://www.rba.gov.au/publications/rdp/2014/pdf/rdp2014-03.pdf>>

The saving ratios are different to the marginal propensity to save (MPS). Savings ratios are average savings while the MPS is how much of any additional income will be saved. Ideally the MPS would be better but such figures are not available.

During an economic crisis, both the savings ratios and the MPS increase. The MPS increases faster as worried people attempt to save funds and pay down debt in case of economic loss, like losing their job. The net savings rate in 2009-10 was 6.4 per cent, but today it is 19.8 per cent.⁴ This indicates that consumers are very concerned at the moment and that the MPS today is likely to be much higher. A higher MPS would reduce the effectiveness of the tax cuts.

The matching of the distribution of the tax cuts and the savings ratios is not exact. The tax cuts have been done on the distribution of taxpayers by income while the savings ratios are done on the basis of households by income. There are likely to be a significant group of households at the bottom of the income distribution that are not included in the distribution of taxpayers. These include people on income support like those on the age pension that do not submit a tax return. This is likely to overestimate the impact of savings on the tax cuts.

Imports

Money from the tax cut that is used to purchase imports does not increase demand for domestic goods and services and hence employment in Australia. The Marginal Propensity to Import (MPM) tells us how much of any additional income is spent on imports. The MPM is estimated in a Treasury Roundup.⁵ They estimate it to be 0.2. This means that 20 per cent of additional purchases by consumers are imported.

If we add the estimate for the leakage of savings to the leakage of imports, we estimate that approximately 39 per cent of the tax cut is either saved or used to buy imports.

Taxation

Some of the domestically produced goods and services that are purchased with the money from the tax cut are going to be subject to indirect taxes like the GST, excise on

⁴ ABS Cat no 5206.0 – Australian National Accounts: National Income, Expenditure and Product, June 2020

⁵ Dark D & Hawkins J (2005) *Why Have Australia's Imports of Goods Increased So Much?*, Economic Roundup Summer 2004–05, Treasury available at <https://treasury.gov.au/sites/default/files/2019-03/04_Imports_of_goods.pdf>

fuel and alcohol etc. This will see some of the money flow back to the government and this money will not add to aggregate demand and generate additional jobs.

GST is by far the largest with just under half of goods and services purchased by households subject to a 10 per cent GST. We estimate that about five per cent of all money spent goes in indirect taxes.

If we add in our estimate for taxation leakage to the leakage for savings and imports, we estimate that approximately 42 per cent of the tax cut is either saved, used to buy imports or used to pay tax.

Calculation of additional jobs

Now that we know the proportion of the tax cut that will be spent on domestically produced goods and services minus tax paid on those goods and services, we can use Australian Bureau of Statistics figures for the amount of jobs created per \$1 million of consumer spending. These figures show that for every \$1 million of consumer spending 1.79 jobs are created.⁶

From a tax cut of \$13 billion, about 58 per cent or \$7.5 billion is left after leakages, which generates 13,400 additional jobs.

As noted above leakages are difficult to estimate and so this paper has also calculated estimates for the total number of additional jobs if there were no leakages. This is a highly implausible assumption, but it allows us to see the maximum possible number of additional jobs. This gives us a better understanding when comparing estimates for additional jobs from bringing forward the tax cuts and estimates for additional jobs from direct government spending.

If there were no leakages, then a \$13 billion tax cut would generate an additional 23,300 jobs.

JOBS FROM GOVERNMENT SPENDING

Direct employment effects can be calculated for Government spending by industry using Australian Bureau of Statistics figures. This paper has chosen five employment intensive industries, but others could be chosen. The jobs per \$1 million in additional

⁶ TAI calculations based on ABS Cat no 6306.0 - Employee Earnings and Hours, Australia, May 2018, 22/01/2019 and Cat no 5209.0.55.001 - Australian National Accounts: Input-Output Tables, 2016-17, 27/06/2019.

spending are shown in Figure 2. It should be noted that these are additional jobs not full-time equivalents. Some of the jobs are full time and some are part time.

Figure 2 – Employment intensive industries and additional jobs created per \$1 million spent

Employment intensive industries	Jobs per \$1 million
University education	8.41
Childcare	19.95
Healthcare	10.18
Aged care	14.75
Creative arts	8.99

Source: ABS Cat no 8155 Australian Industry, 2018-19

From this we can estimate the additional jobs for a given amount of government stimulus spending. For the purposes of this paper we have split the \$13 billion evenly among the five industries but it could be split in many different ways.

If the \$13 billion is split evenly then an additional 161,900 jobs are created. The breakdown by industry is shown in Table 3.

Table 3 - Estimates for additional direct jobs created from spending \$13 billion evenly split among five employment intensive industries

Employment intensive industries	Additional jobs
University education	21,900
Childcare	51,900
Healthcare	26,500
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Source: Authors calculations

CONCLUSION

Direct government spending on labour intensive industries will generate far more additional employment than an equivalent amount of money spent on handing out tax cuts. This is the case regardless of whether leakages from savings, imports and taxation are included.

Spending on employment intensive industries will generate between seven and 12 times as many jobs when compared to spending the same amount on bringing forward stage 2 of the tax cuts.

The government has repeatedly said that it is focused on jobs, jobs, jobs. If this is truly the case, then it should focus its stimulus spending on those programs that will generate the most employment. Tax cuts to high income earners should not be a priority.