Research Note: Modelling of the 2019 Liberal-National Coalition and Australian Labor Party Personal Income Tax Policies

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Introduction

The Liberal-National Coalition ("the Coalition") and the Australian Labor Party are both proposing a number of changes to the personal income taxation system. This paper considers the average household tax rate, fiscal consequences and distributional consequences of the Coalition and Labor personal income tax policies over the period 2018-19 to 2029-30. We consider which household types gain the most and whether or not the tax cuts are sufficient to overcome bracket creep.

For the purpose of this research note the Coalition personal income taxation policies include the changes contained in the Federal Budget for 2019-20 and the changes announced in Federal Budget for 2018-19 (Commonwealth of Australia, 2018, and 2019). The Coalition changes are effectively in two stages. The first stage consists of modest tax cuts provided in 2018-19 which are aimed at low and middle income earners. The second stage are more significant tax cuts that are directed more towards middle and higher income earners (these include changes in the 2018-19 and 2019-20 Budgets). The Government rationale for the tax cuts are designed to ‘be simpler, reward effort and maintain progressivity’ (Commonwealth of Australia, 2019b). The tax cuts are also claimed to return to taxpayers some of the fiscal drag being generated by the non-indexation of tax thresholds.

The Labor personal income tax changes considered are those announced by the Hon. Bill Shorten, Leader of the Opposition in the Budget Reply Speech (Shorten, 2019) and described in the associated Media Release (Shorten and Bowen, 2019). The Labor changes for the period to 2022-23 are slightly more generous for some lower income earners than the Coalition changes. The Labor policy does not implement the larger Coalition tax cuts from 2022-23 onwards. The analysis here focusses on the personal income tax changes to rates, thresholds and offsets and so does not include several other planned Labor changes such as negative gearing, capital gains, or franking credits.

Methodology

The approach adopted in this paper is to use the ANU PolicyMod model of the Australian tax and transfer system. This model is based on an ABS income survey for 2015-16 and has been adjusted to better reflect the population of 2017/18 and beyond using a range of administration data and official statistics. The model simulates the current policy settings of most of the tax and transfer system in Australia. In this paper we simulate the proposed tax changes and apply the assumptions in the Federal Budget around wages and prices. We compare the proposed policy with that of the existing policy to determine the overall fiscal impact of the policy change and the distributional impact for each year for Australian households.

In determining the impact of tax cuts it’s important to define the appropriate counter-factual. The standard approach is to compare the alternative policy (Budget's 2018-19 and 2019-20 for the Coalition; Budget Reply Speech and associated Media Release for Labor) with the existing legislated policy. An analytical challenge is that for personal income tax it is important to take into account the impact of wage and consumer prices increases over time which, in the absence of adjustments to tax thresholds, results in the population being pushed into higher tax brackets which increases average tax rates; a process known as 'bracket creep'. So while it may appear that a tax cut means more money in people’s pockets in reality the tax cuts may only be compensating for bracket creep. There have been many examples through recent history of changes to tax rates and thresholds that in a ‘day-after’ sense do reduce tax liabilities but over the longer-term result in average tax rates being largely unchanged as a result of the effects of bracket creep.

To better understand the real impact of a tax change we calculate average tax rates for the Coalition and Labor policies and for the no policy change scenario through to 2029-30. A genuine tax cut occurs in the situation where average tax rates are lower than both current tax rates and projected future tax rates for the no policy change scenario. For technical reasons there may be other demographic or economic changes occurring through time that dilute this impact (albeit modestly). Therefore in order to ensure our results are robust we use two other benchmarks. The first is to simulate increasing all tax thresholds with average wages growth (both actual growth and those projected in the budget). The second is the share of tax paid by each income decile. Where that share increases for lower income groups and decreases for higher income groups the tax system will have become less progressive.

The distributional analysis is more straightforward with a direct comparison for the years beyond 2018-19. For each year a base data set is created in PolicyMod using the existing legislated policies. A comparison data set is also created in PolicyMod using the alternative or proposed policy from the 2019-20 Budget. Both data sets are based on the same underlying assumptions and survey data but the policies differ to the extent of policy change in the budget – as that policy relates to personal income taxation. For each year we can directly calculate the impact on each of PolicyMod's income units from policy change in the budget. These changes are then aggregated to household groups, such as low income or high income households or different family types.

The model does not attempt to impose or estimate any behavioural change on persons as a result of policy change. It should be expected that tax cuts would have some behavioural consequences relative to the current policy however these impacts are not estimated here[1]. Our overall fiscal impact is very similar to that reported in the Federal Budget of around $307 billion in tax cuts (relative to the 2017-18 policy trajectory) between 2018-19 to 2029-30.

Policy Changes

The modelling here focuses only on the personal income taxation changes over the forward estimates and some more substantial changes that are proposed beyond the forward estimates for 2022-23 and 2024-25. The modelling extends over a 10 year period beyond the current year to 2029-30.[2]

Modelled Changes:

1) *Low and Middle Income Tax Offset*

1 Estimating the behavioural impacts requires complex econometric modelling beyond the scope of this paper. Such modelling tends to only tell a partial story with changes in workforce participation note necessarily being modelled alongside labor force demand. It is also the case that behavioural modelling can lead to double counting of the policy impact as broad budget assumptions such as wages growth and employment growth already account for behaviour and economic change in response to policy change.

2 Caution should be taken in analysis of tax cuts particularly beyond the forward estimates where it is likely that other tax changes will be taken by future governments.

A tax offset of up to $255 for taxpayers with taxable income of $37,000 or less. Between $37,000 and $48,000, the value of the offset increases at a rate of 7.5 cents per dollar to the maximum benefit of $1080. Taxpayers with taxable incomes from $48,000 to $90,000 will be eligible for the maximum offset of $1080. From $90,001 to $126,000, the offset will phase out at a rate of 3 cents per dollar. The benefit of the Low and Middle Income Tax Offset is in addition to the existing Low Income Tax Offset. This offset is available for the 2018 to 2021 financial years only.

2) From 2022-23 the Low Income Offset increases from $445 to $700 and the personal income tax bracket for the 19 per cent rate extended to $45,000 from $37,000. LITO withdrawn at 5 per cent between $37,000 and $40,000 and then removed at current 1.5 per cent rate.
3) 32.5 per cent tax rate threshold increased from $90,000 to $120,000 in 2022-23.
4) From 2024-25 the 32.5 per cent tax rate threshold extended to $200,000 and reduced to 30 per cent. The top rate of 45 per cent applied beyond that threshold (up from the previous $180,000).

The Labor policy includes only the changes in (1) with the exception that the base amount will be $350 rather than $250 per year and some minor adjustments to the related tapers. We have not included the Budget Repair Levy which is a 2 per cent levy on each dollar of income above $180,000 per year of taxable income. It is not clear at this point whether the Labor Party will continue this levy as its continuation depends on the fiscal position in future years.

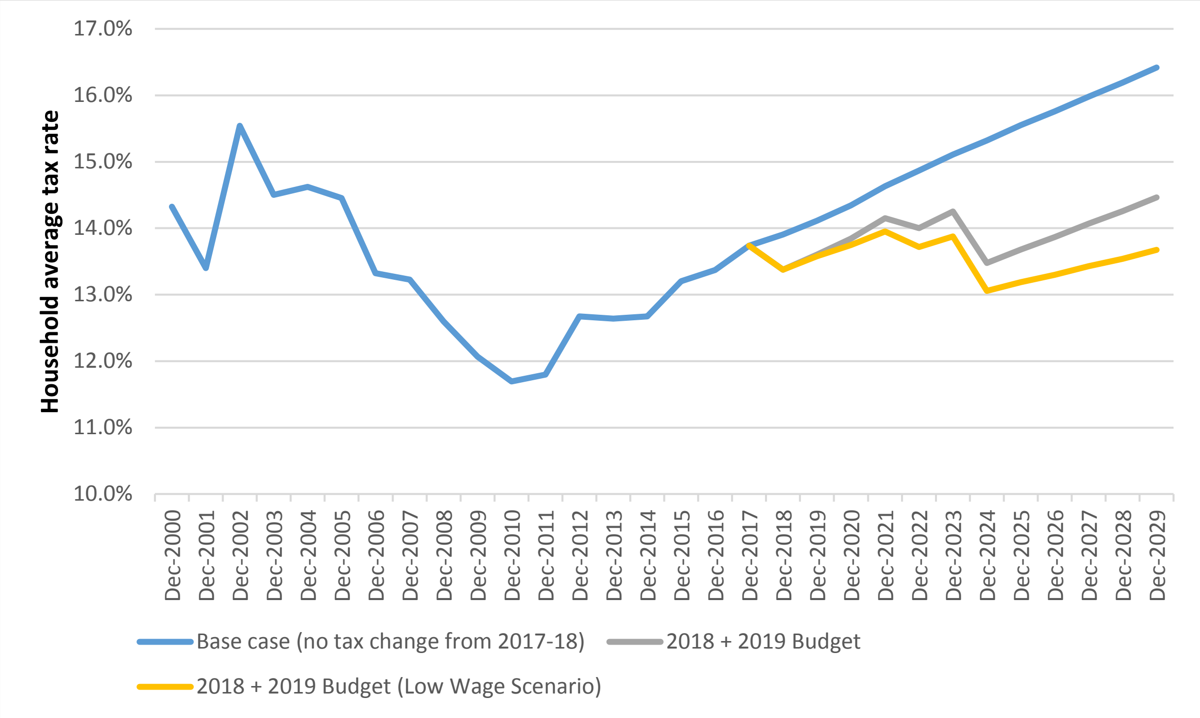
Average tax rates

When considering the impact of the Coalition and ALP personal income tax policies it important to have an understanding of the trends in average tax rates. Figure 1 shows average tax rates for households over the period 2000 to 2017 (based on National Accounts rather than PolicyMod). Over this period average tax rates for households peaked in 2002 at 15.5 per cent. Significant tax cuts and threshold changes lowered average tax rates to around 11.7 per cent by 2010. Since 2010 average household tax rates have increased back up to around 13.7 per cent by 2017.

In the absence of policy change it would be expected that bracket creep will push these average rates higher so that by 2025 tax rates will reach 15.6% and continue to increase beyond that point to be 16.4% in 2029. Figure 1 assumes that wages growth are in line with Budget projections of 2.5 per cent for 2018-19 and gradually increasing to 3.5 per cent by 2021-22 and for the remainder of the period.[3]

3 The National Accounts basis includes a denominator for gross income that has a broader concept of income than that contained in the ABS household survey which leads to a lower average tax rate compared to the survey approach used in PolicyMod.

Figure 1: Household Average Tax Rates, Past and Future, 2000 - 2029



Source: ABS National Accounts, December 2018, 5206.0, ANU PolicyMod

Our modelling shows that under the Coalition proposed tax changes, household average tax rates initially fall slightly and then increase through to 2023-24 but are lower than under the no policy change base case and are lower by 2024. Under the lower wage growth scenario If wages growth is lower than projected by the Budget (2.5 per cent rather than 3.5 per cent over the years to 2029-30) the average tax rate will be even lower due to less bracket creep occurring.

Using PolicyMod the average tax rate for Australian households in 2017-18 (prior to the proposed tax changes modelled in this paper) was 18 per cent of gross household income. Figure 2 shows average tax rate for Australian households over the period 2017-18 to 2023-24 for five scenarios:

- base case of no personal income tax policy change from 2017
- 2017 personal income tax policy settings but with all thresholds indexed to wage growth
- The Coalition’s 2018-19 and 2019-20 Budget personal income tax changes with 3.5 per cent per year wage growth
- The Coalition’s 2018-19 and 2019-20 Budget personal income tax changes with 2.5 per cent per year wage growth
- Labour’s personal income tax changes.

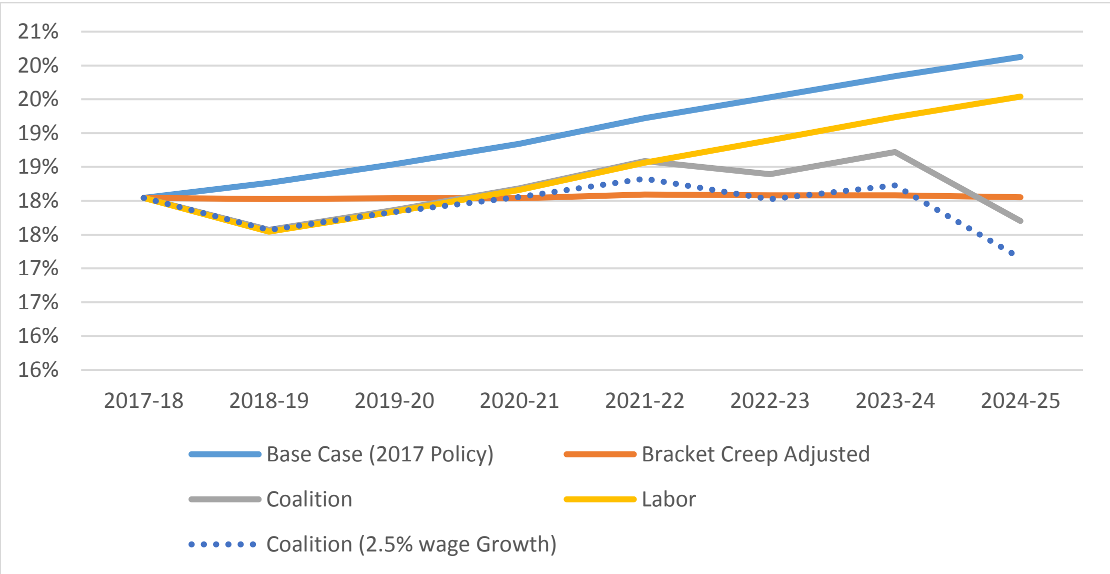
Under there no changes to the existing tax rates and thresholds the average household tax rate would increase dramatically to 20.1 per cent by 2024-25.

Following a very slight reduction in the average tax rate between 2017-18 and 2018-19, the Coalition's tax changes will mean an increase in the average household tax rate until a strong reduction in 2024-25 to a modest reduction compared to 2017-18 rates to 17.7 per cent. Were wages growth set at a slower 2.5 per cent per year the average rate lowers to 17.2 per cent in 2024-25. As would be expected, our benchmark where tax thresholds are increased in line with expected wages growth, average tax rates remain unchanged at about 18 per cent.

Under Labor personal income tax policy, prior to 2022-23, the household average tax rates through to 2021-22 are virtually identical to those under the Coalition's policy, but they increase to be 19.5% in 2024-25.

In short, this implies that by 2024-25 average tax rates will be lowest under the Coalition plan. The Coalition plan by 2024-25 does modestly overcompensate compared to the bracket creep adjusted benchmark – implying real tax cuts by 2024-25. Labor tax changes reduce tax rates to 2019 but will be higher by 2024-25 and well above the benchmark policy.

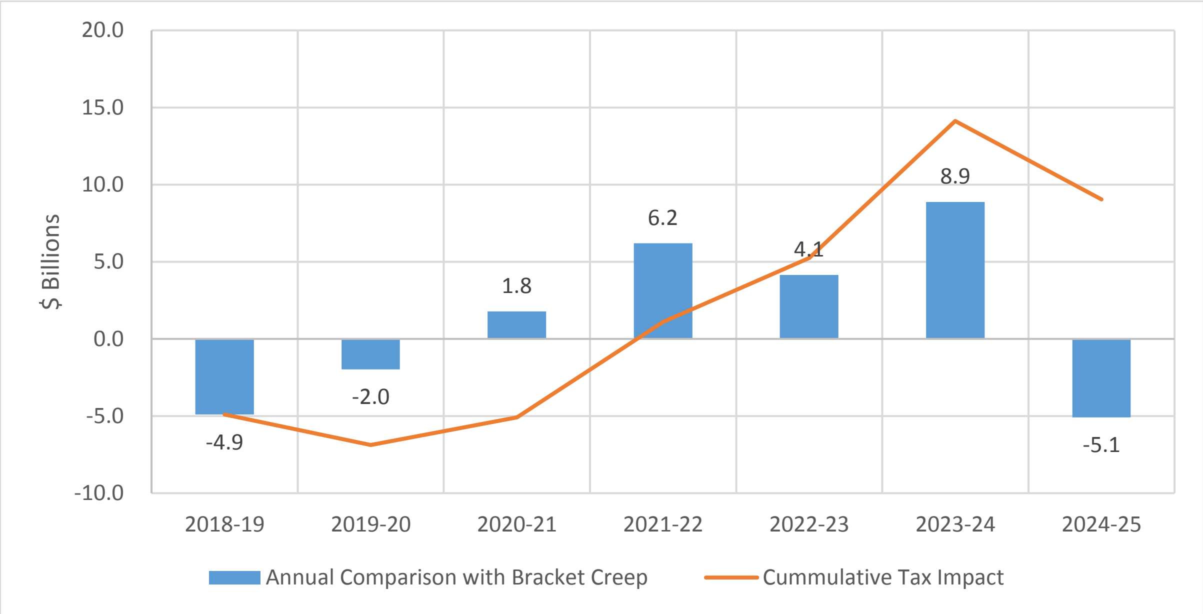
Figure 2: Average Tax Rate Projections (%), Households



Source: ANU PolicyMod.

The Coalition proposed tax settings do eventually reduce average tax rates but over the shorter term tax rates will continue to increase. Compared with tax revenue for the benchmark policy (where thresholds are adjusted for bracket creep) there still remains an overall increase in tax revenue by a cumulative $9 billion to 2024-25 (Figure 3).

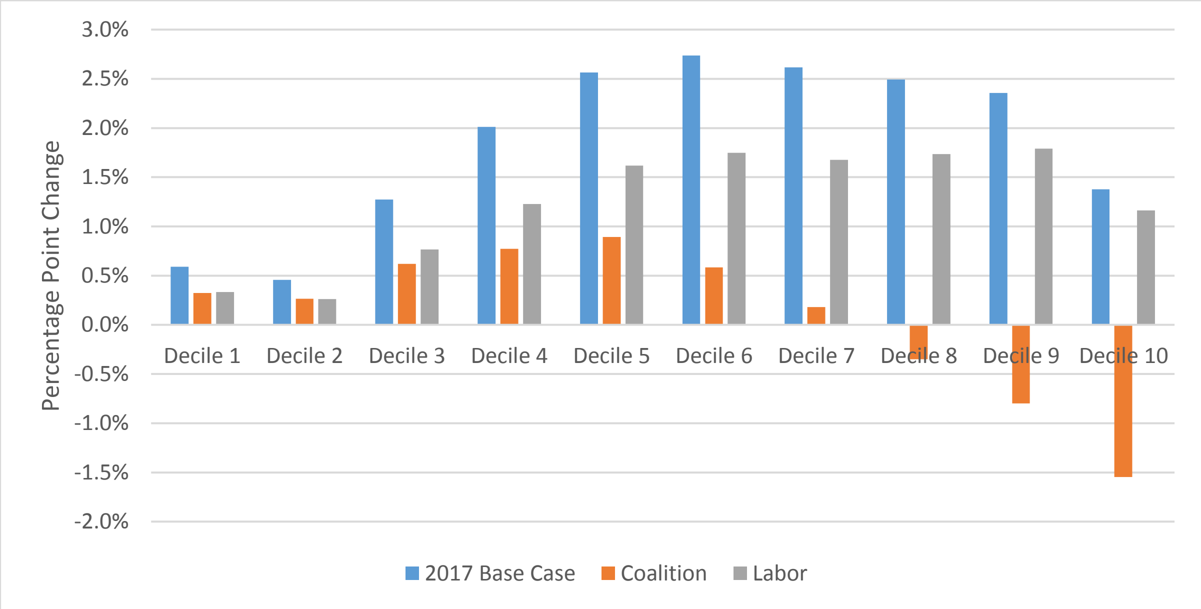
Figure 3: Comparison of Coalition Plan with simple adjustment of tax thresholds with wages (Bracket Creep) ($billion)



Source: ANU PolicyMod

Figure 4 compares the changes in average household tax rates between 2017-18 and 2024-25 by equivalised household income decile under the base case of no policy change, the Coalition and Labour policies. The Coalition changes favour higher income households with a reduction of average tax rates of 1.5 percentage points compared to middle income increase of around 0.9 percentage points. The Labor policy increases average tax rates 2024-25 for all income groups with modest reductions compared the base case of 2017-18 policy. This suggests that over time tax rates are expected to increase for all income groups in the absence of policy change. The Labor policy modestly lowers the impact while the Coalition policy reduces tax rates for the highest two deciles. This suggests that the Coalition policy will tend to lead to a modestly less progressive tax system than is the case for 2017-18.

Figure 4: Percentage Point Change in Average Household Tax Rates by Household Equivalised Income Decile, 2017-18 and 2024-25



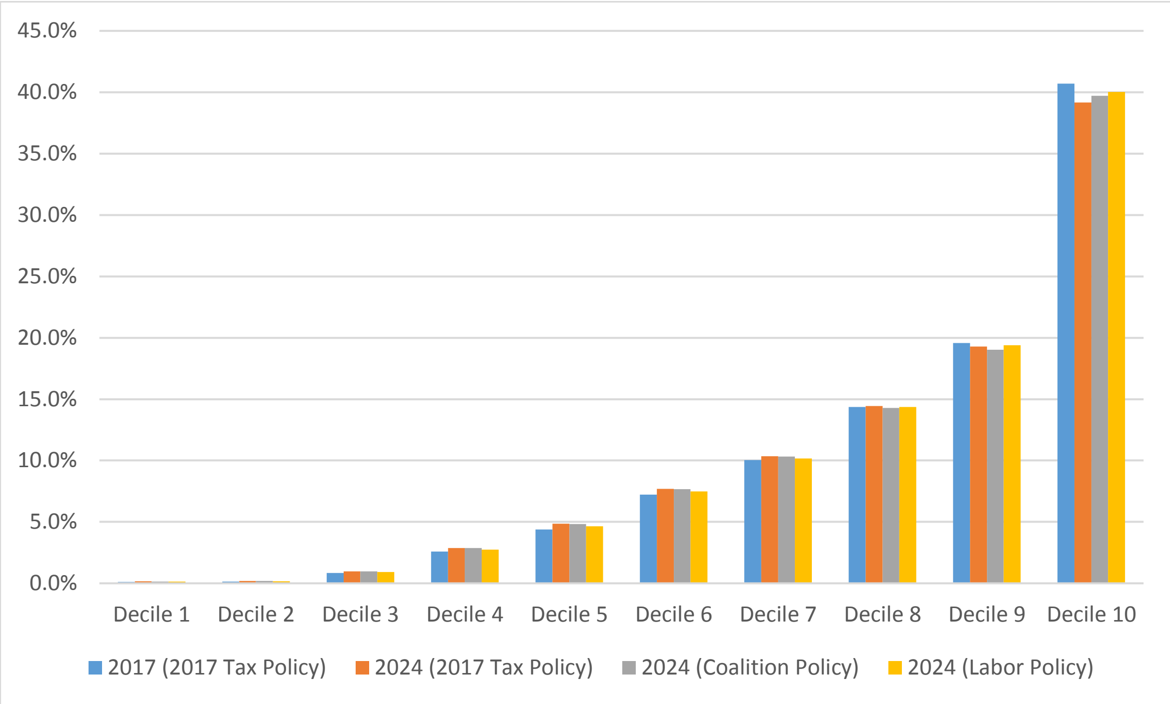
Notes: Deciles are for equivalised disposable household income. Decile 1 is the lowest income group and decile 10 the highest income group.

Source: ANU PolicyMod

An alternative perspective on the progressivity is to consider the share of tax paid by each equivalised household income decile. Perhaps surprisingly, it is found that leaving existing tax rates and thresholds unchanged leads to decile 10 paying a lower share of tax relative to the other policies by 2024-25. Where tax policy is left unchanged bracket creep is allowed to operate fully for all years into the future. Bracket creep tends to be regressive and impacts low and middle income households more than high income households.

The Coalition policy will see a modest decline in the tax share of the top decile at 39.7 per cent compared to the current share for the 2017-18 tax year at 40.7 per cent. Labor policy shifts the share down to 40 per cent. In the absence of any tax change the share drops the most to 39.2 per cent (Figure 5).

Figure 5 Share of Tax Revenue by Income Decile



Notes: Deciles are for equivalised disposable household income. Decile 1 is the lowest income group and decile 10 the highest income group.

Source: ANU PolicyMod

For a given range of incomes the Coalition policy may appear to be a flatter tax structure but once we take into account increased wages and the changing distribution of income and population through time the result is that a similar share of tax will be paid by the top 10 per cent regardless of whether Labor or Liberal policy prevails and both will be more than a 'do nothing' policy.

Of course the top 10 per cent is not the full income distribution and doesn't tell the full story on inequality. We can consider the full distributional impact through estimating the Gini Coefficient which applies to disposable income across the full income spectrum regardless of whether tax is paid by a household or not. On this measure we find that by 2024 the Labor policy yields the lowest Gini Coefficient of 0.364. The Coalition policy pushes the Gini Coefficient to 0.37. The absence of any policy change yields a Gini Coefficient of 0.364. The Coalition change increases the tax share of middle income households compared to the Labor policy.

Conclusion

The 2018-19 and 2019-20 Federal Budgets contains significant taxation measures. Initially these measures are tax cuts targeted at lower and middle income individuals but by the middle of next decade the measures are weighted towards higher income individuals.

The Labor Party's alternative tax policy for personal income tax is effectively the same as that of the Coalition up to 2021-22 (albeit slightly more generous to low income households). Beyond 2021-22 the Labor Policy retains their Low and Middle Income Tax Offset but does not make any further changes.

The bracket creep analysis shows that the Coalition tax cuts are significant but they largely just remove the effects of bracket creep. Average tax rates increase across low and middle income households but are lower for high income households.

The extent of bracket creep will depend on wages growth in coming years and the standard Treasury projections for wages growth may well prove optimistic meaning that the impacts of bracket creep may be less significant than that estimated above. This would mean lower tax revenue but also lower average tax rates.

It is unusual for budgets to legislate tax changes that start beyond the 'forward estimates'. Where this happens it should be expected that tax cuts would be applied to temper bracket creep. A natural consequence of a progressive tax system is that such tax cuts tend to 'benefit' higher income households.

We suggest caution be taken in interpreting the distributional analysis above since it is unlikely that our tax system would stay unchanged with no adjustment for bracket creep for a period as long as 10 years. With that said, the results do show significantly larger tax savings for higher income households. Most of the savings are directed towards the top two income deciles. While the tax cuts don't increase tax for lower income groups 'on paper' the impact of bracket creep mean they wont be fully compensated and will pay higher average tax rates in future years under both Coalition and Labor policy – on the bold assumption that future government's don't make further changes to the system.

While the distributional impacts show larger benefits for higher income groups it should be remembered that their average tax rates are still expected to only decline very modestly by 2024-25 and to increase in subsequent years. That said, the targeting of the tax cuts does more strongly favour higher income households over lower income households where the cuts are much more modest from a dollar perspective and to a lesser extent proportional sense.

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