Cost of Living Budget Package: Distributional Modelling

CSRM Research Note 2/22

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Introduction

The 2022 Federal Budget included several measures designed to provide 'cost of living' relief for Australian households. These measures include a $420 'cost of living offset' for low and middle income earners, and a $250 cost of living payment for welfare recipients and concession card holders, and a halving of petrol and diesel excise.

The government suggests households are facing cost of living pressures as a result of the pandemic, the invasion of Ukraine and extreme weather events. The approach by the government is said to be temporary and targeted. This research note estimates which household income groups benefit the most from the package.

Budget Policy Changes

The focus in this research note is on the three major measures proposed by the government to assist in offsetting cost of living pressures. The three measures include the following:

1. **Increasing the Low and Middle Income Tax Offset (LMITO) from a maximum of $1080 to $1500 for the 2021-22 financial year.**

This tax offset benefits individuals and households by way of lowering their tax bill by an additional $420. The offset has the same design as the previous LMITO except that the offset amount is increased by $420 for all persons who were eligible for the previously defined LMITO. This measure is currently modelled in the Australian National University's PolicyMod model of the Australian tax and transfer system.

The budget papers suggest that the expanded 2021-22 LMITO lowers tax revenue (to the benefit of individuals and households) by $4.1 billion for the one year of operation. PolicyMod estimates almost exactly the same loss of revenue at $4.08 billion.

2. **Halving fuel excise for 6 months lowers the per litre excise amount by 22.1 cents. The fuel price reduction is expected to be slightly larger with GST applying to a lower excise rate.**

The excise reduction impact for households is lower than that stated in the budget papers. The budget papers include the impact on business and households whereas our estimates are based on households only. We use the ABS Household Expenditure Survey (HES) 2015-16 (updated to 2022) to estimate the household impact. The updated HES estimates a household impact of $2 billion in lower

petrol prices flowing from the 6 months reduction in excise. Using the detailed unit record data in the HES the impact of the excise change is estimated for each household (noting not all households benefit as they don't purchase petrol or diesel). By ranking households by income and splitting these households into income quintiles. Each income quintile's excise savings are averaged and applied to our 2022 based PolicyMod model. For the purpose of this analysis we apply the quintile averages from the HES to the unit records (households) in PolicyMod according to the unit's respective income quintile.

3. **$250 Cost of Living Payment to eligible welfare recipients and concession card holders.**

The government will provide a one-off, non-taxable, $250 payment to eligible welfare payment recipients and concession card holders. This payment will be made in April 2022. The payment will be made to effectively all adult recipients of welfare payments and anyone who receives a pensioner or senior's concession card. This amounts to roughly 6 million Australians. The budget papers estimate the measure's expenditure at $1.5 billion. PolicyMod estimates the measure expenditure at $1.58 billion.

PolicyMod

PolicyMod is a microsimulation model of the Australian tax and welfare system based on the ABS Survey of Income and Housing (SIH 2017-18). The model simulates tax and transfer (welfare) payments on top of the very detailed income and wealth data already included in the SIH. To enable accurate modelling of tax and transfer policy for today and into the future PolicyMod is projected into the future using detailed demographic and economic projections based on ABS demographic data and projections and the latest projections from the Treasury and the RBA. The model is benchmarked to detailed taxable income data from the Australian Taxation Office and welfare recipient numbers from Department of Social Services.

This modelling in this research note provides a 'static' assessment of gains to households in that there is no attempt made to account for behavioural change such as changes in petrol or diesel use or workforce participation.

Results

With all three measures modelled in PolicyMod we combine them into a single package of reform and estimate the distributional impact. We estimate the distributional impact by household income quintiles. We base this on equivalised income rankings where we adjust (or equivalise) household incomes to a single adult basis using the OECD-modified method. These ranked incomes are then grouped into the

lowest 20 per cent (or quintile 1) and then next lowest 20 per cent (or quintile 2) and so on up to the top 20 per cent (or quintile 5).

Figure 1 shows the share of benefits or gains from the Cost of Living package. The figure shows that the majority of gains flow to middle and higher income households[1]. Around 45 per cent of gains are distributed to the top 40 per cent of households when ranked by income. The bottom 20 per cent of households only receive 15 per cent of the gains. Figure 1 also shows the relative risk of financial stress by income quintile. The bottom 20 per cent of income households have a 36 per cent chance of recording some form of financial stress as measured in the 2015-16 HES. This rate is around 6 times higher than for those persons in the top income quintile (6 per cent)[2].

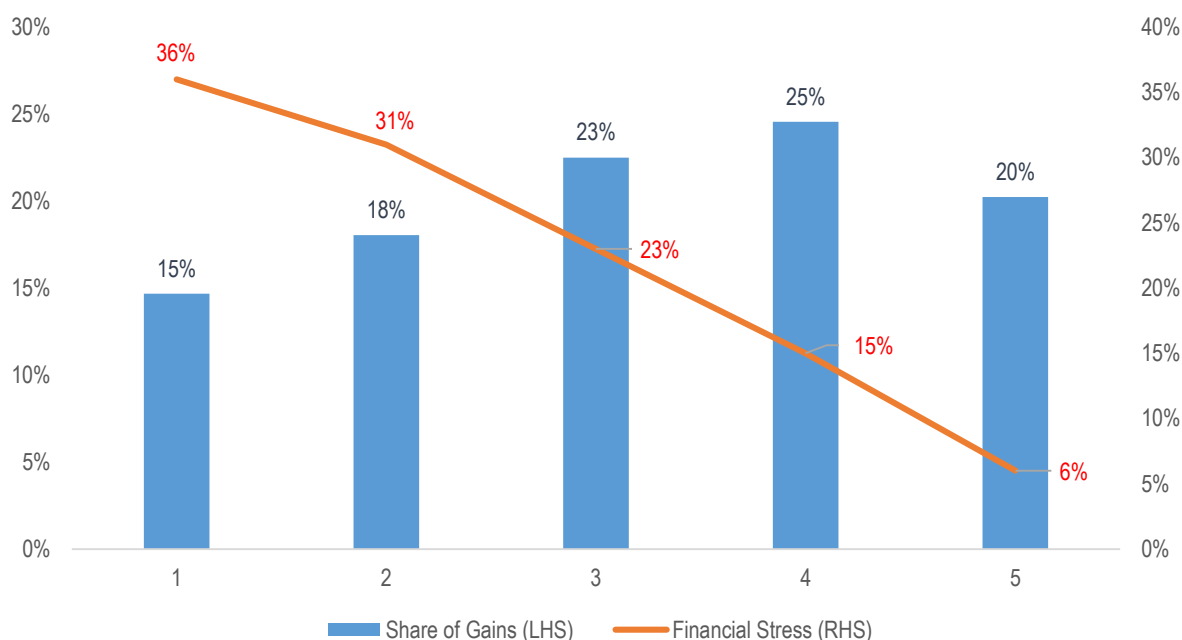**Figure 1 % Share of Gains, Financial Stress by Income Quintile, PolicyMod (2022), HES 2015-16**

Figure 1 shows that the majority of the benefit of the cost of living package in the Federal Budget flows to middle and higher income households. In contrast, those households with the highest rates of financial stress (Quintile 1 and Quintile 2) receive the lowest share of the dollar gains.

Figure 2 shows the raw dollar gains from the cost of living package and shows a very similar pattern to Figure 1 with the largest gains going to middle and higher income households. Quintile 1 households

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[1] Figure 1 adjusts for households size and so shows the distribution of 'equivalised' gains. Lower income households have, on average, smaller household sizes than higher income households. Without such adjustment the share for the lower income groups is marginally lower.
[2] Financial Stress measured here does not include the ABS 'missing out' or the 'management of household income' questions. The measure does include the remaining 8 financial stress questions asked in the HES.

receive $434 on average compared to $738 overall (59 per cent of the average) and only 45 per cent of quintile 4 which benefits the most in raw dollars ($968).

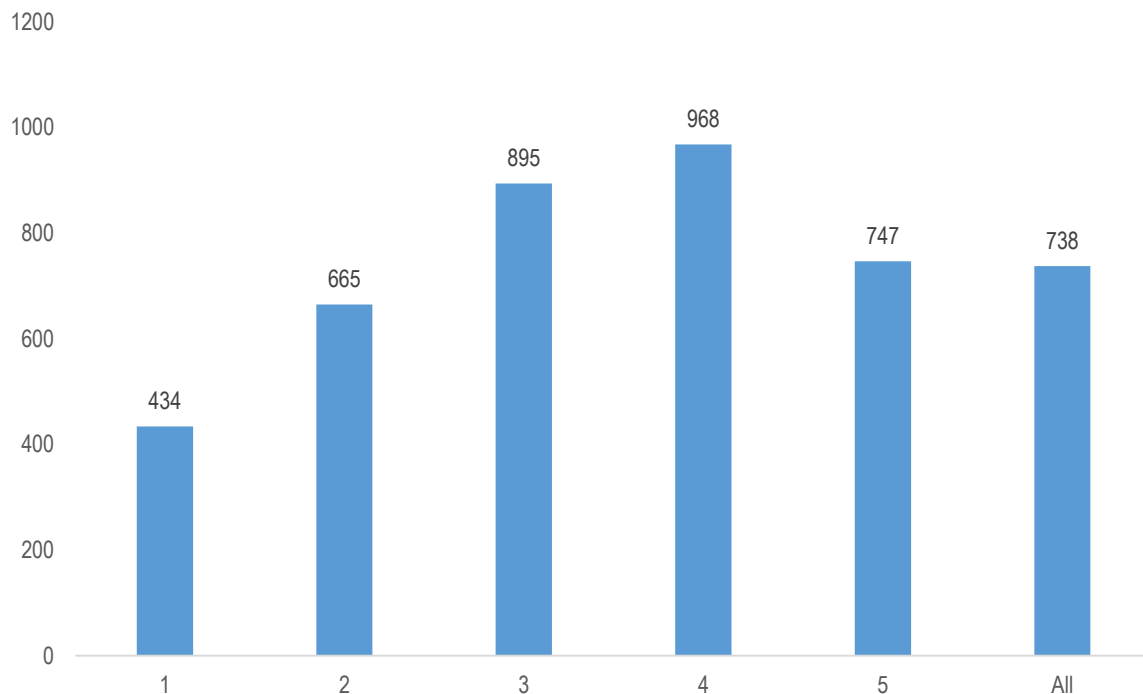**Figure 2 $ Gains by Income Quintile, PolicyMod (2022), HES**

Figure 3 show the gains relative to disposable income and the results show a different pattern. Since low income households have significantly lower incomes the ratio of gains to income shows that the benefits are greatest for low income households. The lowest income quintile gains 1.6 per cent compared to just 0.3 per cent for the top income quintile.

Figure 3 % Change Relative to Disposable Income by Income Quintile, PolicyMod (2022), HES
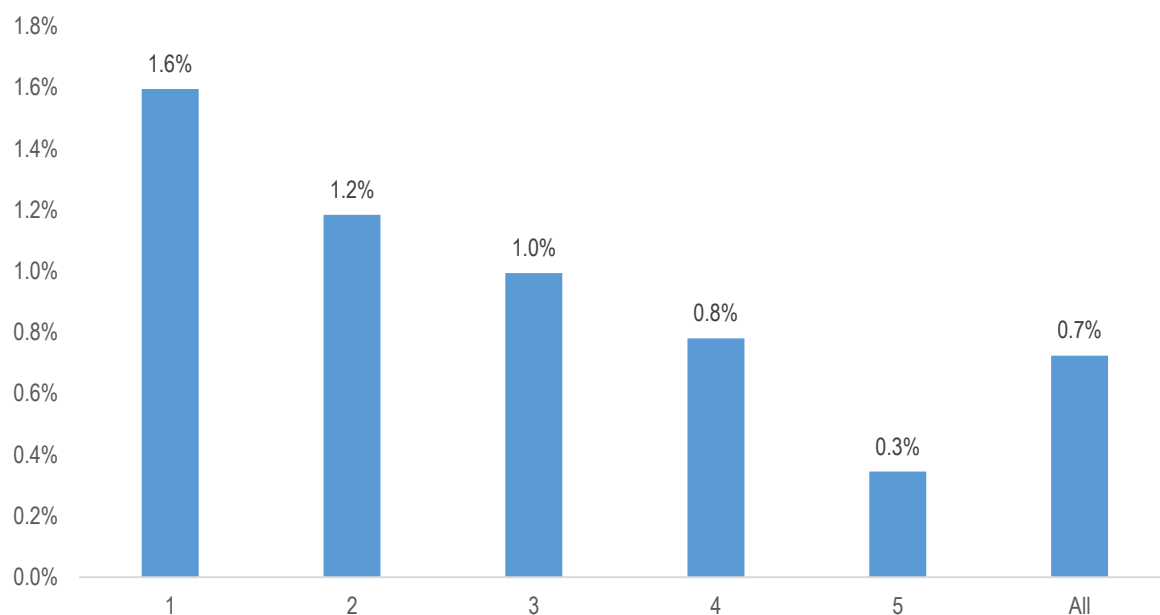
Conclusion

Overall, we find that the cost of living package in the federal budget provides the majority of financial support to middle and higher income households. These households tend to have significantly lower rates of financial stress than lower income households. This finding implies the benefits of the cost of living package has not been targeted to lower income households where the financial needs are greatest.

The main driver of this result is that the LMITO tax offset (easily the largest of the three measures by expected gains) operates within the tax system and people who pay tax tend to have higher incomes than people who don't pay tax. While LMITO is targeted at people with incomes below $126,000 such an income is a relatively high income, well above a low or middle income.

On a relative to income measure we do find, however that the package is progressive as the gains in a relative sense are larger for low income households compared to higher income households.