Australian National University | CENTRE FOR SOCIAL RESEARCH & METHODS

Housing Cost Trends and Projections:

Research Note

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Introduction

Housing costs are for many households a very significant share of their regular expenditure. Those with a mortgage pay both interest and usually slowly pay off the principal of their house value. Those who rent pay a regular amount to a landlord. Interest rates have increased significantly over the past 12 months and advertised rents have also increased dramatically. Actual rents, as measured by the ABS Consumer Price Index for capital cities, have also increased but not to the same extent as advertised rents (ABS 2023). This research note considers how housing costs have changed for households relative to their income over the past four decades, and in particular, how the most recent changes in rents and mortgage rates impact households for different income levels.

Using the ANU model of tax and transfers, PolicyMod, disposable income can be estimated for households across the income distribution taking into account recent changes in government policy (such as the recent increase in rent assistance and JobSeeker payments) and also important changes in the labour market such as lower unemployment rates and higher employment rates. The model also takes into account changes in average rents and mortgage interest and principal repayments. Combining all these changes provides useful insights into which groups recent changes in the housing market are most likely to impact. Is it higher income or lower income households, renters or mortgagors who are impacted the most?

This research combines ABS income surveys since 1984 to consider how housing costs have altered up to 2019. Beyond 2019 PolicyMod (also based on income survey data) provides estimates and projections of how housing costs and incomes have changed for households up to 2023 (December).

Methodology

The ABS Survey of Income and Housing (and expenditure survey) provides the most comprehensive data on housing costs and incomes in Australia and is available usually every two years. The latest survey data that is available as a unit record file is the 2019-20 survey. Estimates of income and housing costs beyond that point require estimation using microsimulation modelling.

All results in this paper are based on PolicyMod estimates of housing cost to income ratio. Values in years prior to 2019 are based on the *movement* of that ratio for each survey year back to 1984[1]. It is

[1] Years prior to 2007 adjustments to income have been made to align more closely to the ABS' updated methodology applying to 2007 and beyond.

not necessarily clear whether the basis should be the PolicyMod estimate or the earlier survey data. The judgement here is that PolicyMod is based on the same survey data but has the advantage of being benchmarked to administration data that was either not available or not used by the ABS in their original survey estimates. PolicyMod is benchmarked to a detailed range of administration sources such as the ATO taxable income distribution data and administration numbers for each welfare payment including income distribution data where available.

PolicyMod is a microsimulation model of Australia's tax and transfer system and is based on actual household data as contained in the Australian Bureau of Statistics Survey of Income and Housing (SIH 2017-18). The underlying ABS survey data is updated to future years to incorporate economic and demographic changes. For example, incomes are uprated (increased) in line with average weekly earnings, rental incomes increased with the ABS rent index and populations are altered to account for population growth and changes in labour market outcomes.

PolicyMod also takes account of policy changes such as those in the recent 2023 Commonwealth Budget. The most recent budget includes a range of measures that increase the budget for transfer payments such as the JobSeeker payment and eligibility changes to parenting payment. The model also takes account of other important changes to policy in recent years and those expected later this year such as the 2022 removal of the Low and Middle Income Tax Offset (LMITO) and the upcoming increase to childcare subsidies.

The modelling takes into account some important changes that alter the income distribution such as the recommendation of the Fair Work Commission to increase wages of minimum wage and award based employment. The model is capable of calculating the impact of their higher wages on both the tax they pay and the welfare payments they may receive. The model does not attempt to calculate behaviour change by individuals or broader economic activity changes – beyond what is already assumed to take place in budget forecasts for variables such as employment and wages growth.

The modelling in PolicyMod does not model the 2020-21 financial year and simply imputes that year with the average of 2019-20 and 2021-22. 2020-21 was the peak of COVID and while attempts have been made to model the COVID period in the past it was judged not to be worthwhile updating the complex array of changes for just that single year for this research.

The analysis in this research note focuses on the share of income that is devoted to housing costs. There are a few matters that should be considered when thinking about the true meaning of such a metric. For mortgages, it is the case in this research that housing costs include not only the interest component but also the principal repayments. This does mean that the metric includes a payment that increases the wealth of a household. In theory it can make sense not to include principal payments and only include interest payments which is the approach adopted by the ABS in their selected living cost index series. However, most households are typically paying both the principal and interest components on a regular basis and would likely consider them to be a joint cost of housing.

It is also the case that financial innovations in recent decades does mean a household can quite easily, through such products as mortgage offset facilities, dis-save while interest rates are high and save when interest rates are low. So long as the dis-saving is over a reasonably short period it may be the case that high mortgage repayments don't inflict serious financial stress on a household. It is the case that in recent years mortgagor households have, on average, built up significant 'buffers' meaning that their repayments are ahead of schedule as they pay down the mortgage more quickly than is required through a standard 25 or 30 year loan. It is also the case that mortgage arrears rates in spite of significant rate increases remain very low and at near-historic low rates. A household may go through considerable financial pressure however to keep up payments.

Mortgage repayments in PolicyMod are split between interest payments and principal repayments. Interest payments are inflated through time according to both changes in interest rates and changes in the stock of debt households hold. The principal is increased by only the change in the stock of debt held by households. The base survey data for PolicyMod is currently the 2017-18 Survey of Income and Housing and all dollar values need to be increased (or decreased) from that period into the future so that the base data better represents the year of analysis. This research paper updates interest rates based on changes in the RBA standard variable rate series. The series has been updated to include the latest June 2023 RBA increase of 25 basis points. It is assumed that rates do not change between July and December of 2023. This may well prove to be an overly conservative assessment of future rate movements.

Rent increases are likely to be more clearly related to financial stress and more likely to be based on the actual 'user cost' of housing. Rents are changed through time in PolicyMod (singe the 2017-18 base survey) using CPI rent index for each capital city. Regional areas are also based on their capital's change. For 2023 it is assumed that annual rent growth will peak mid-2023 but decline later in 2023 to an annual rate of 6 per cent growth for December 2022 to December 2023.

Results

Figure 1 shows a dramatic increase in mortgage costs for mortgagor households beyond 2021. Housing costs for mortgagors were at near 40 year lows in 2021 with costs just below 17 per cent of disposable income. With significant interest rate increases through 2022 and 2023 their share of income devoted to housing costs has increased dramatically to around 23 per cent in 2022 and is projected to be at 25 per cent by the end of 2023 on the conservative basis of no further interest rate increases beyond June 2023. While the *level* of interest rates is returning to historically fairly typical levels they are now applying to debt levels that are, on average, much higher than in past years.

Figure 1 Housing costs as a share of disposable income

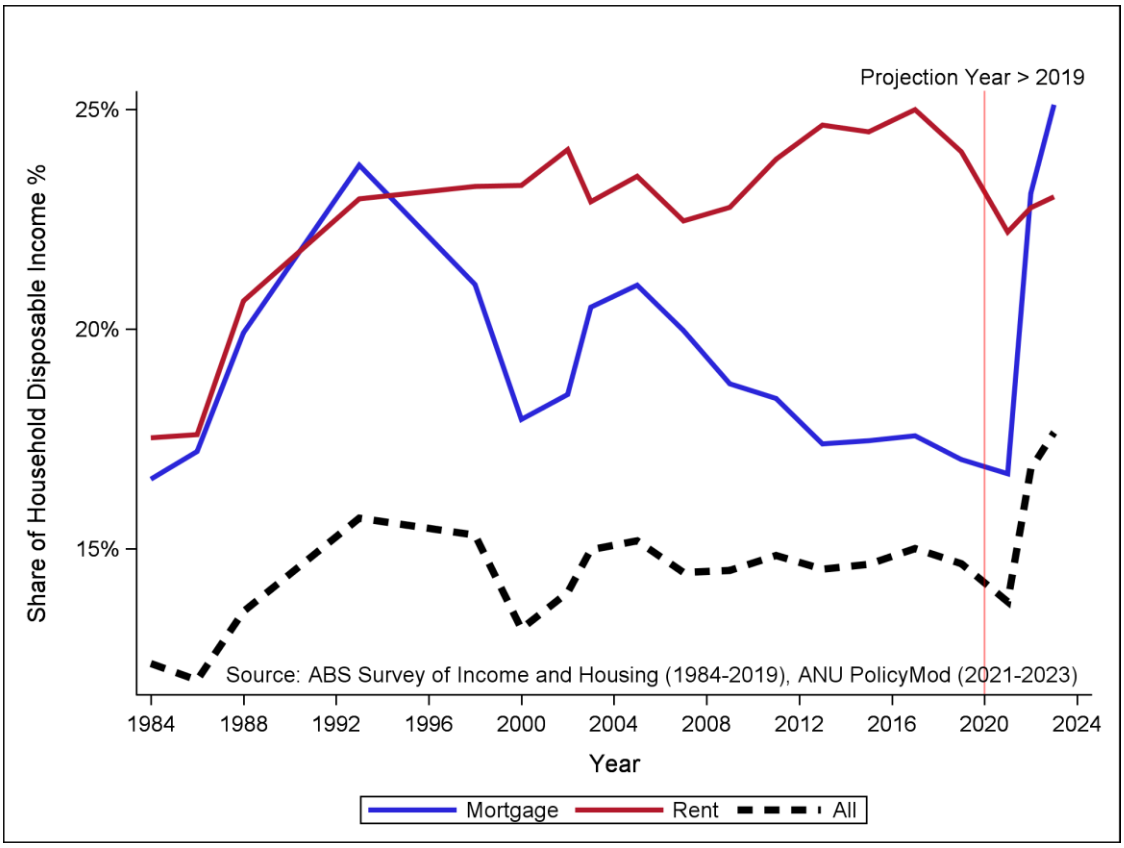


Figure 1 shows that renter housing costs are at lower rates than much of the past decade and slightly below typical rates of the past 30 years. The main reason for this is that rent inflation has been very low in recent years, only just starting to pick up in 2022 and 2023. The recent pick up (around 4 per cent in 2022 and a projected 6 per cent in 2023) was not enough to offset more significant increases in income. Income growth has been relatively strong with strong employment growth, very low unemployment and welfare increases that have benefited low income (often renter households) both through standard indexation (linked to the CPI) and policy change that has increased rent assistance in 2023 and several increases to the JobSeeker payment, shifting some single parents onto the more generous parenting payment and more generous child care subsidies.

Figure 1 shows that overall, all household housing costs as a share of income are also at record highs (since 1984) with the average share increasing from a low in 1986 of 12 per cent to an expected high in December 2023 of 17.6 per cent[2]. The expected high is well up on the pre-COVID rate of 14.7 per cent which was fairly typical for most years over the past 30 years. The main driver of the recent increase to record rates of housing costs is the sharp increase in mortgage costs for mortgagor households.

Figure 2 Mortgagor Household Housing Cost share of Income

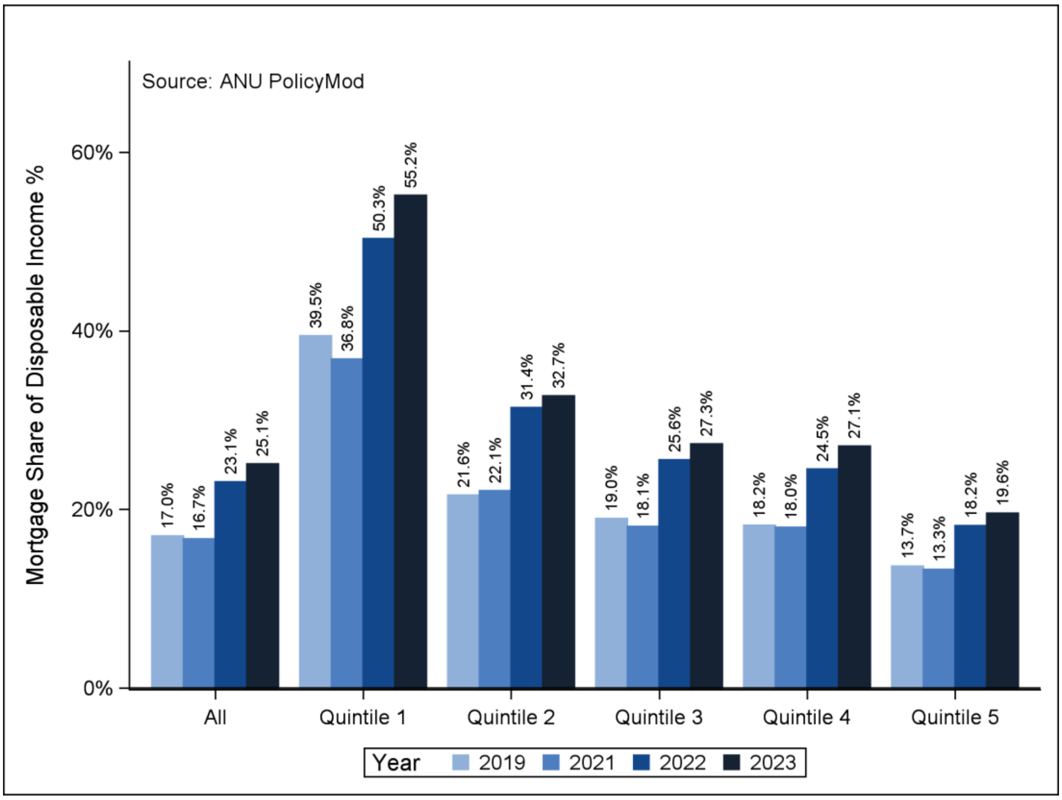


Figure 2 shows the distribution of mortgagor housing costs by income quintile. Income quintiles are based on equivalised income where 'Quintile 1' is the lowest 20 per cent of the income distribution and 'Quintile 5' is the highest 20 per cent of income households. Income quintiles are based on equivalised income meaning that household disposable income is converted to a 'per adult' basis in

[2] Overall housing costs for 'all' households is lower than renter or mortgagor households as around 1 in 3 households own their house outright and have no on-going rent or mortgage costs.

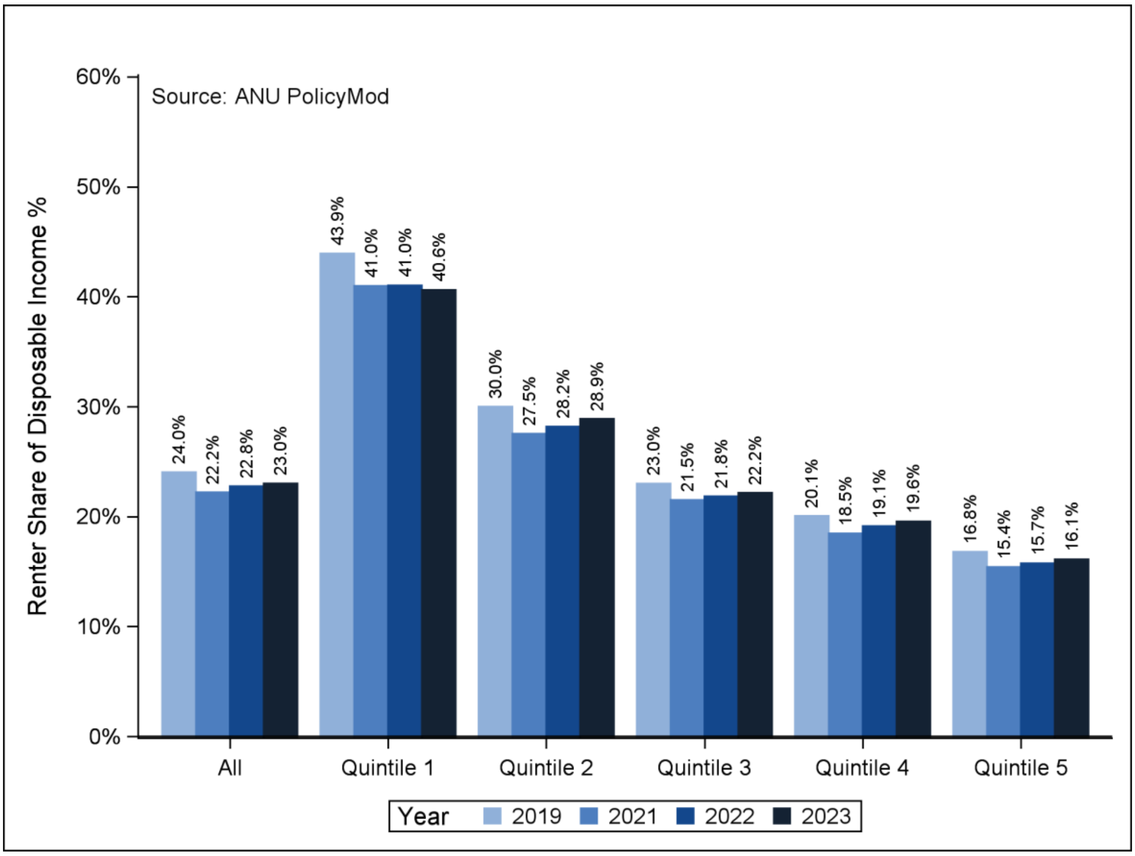
this instance using the OECD-modified method where the first adult has a weight of 1, subsequent adults 0.5 and children under 15 0.3.

Clearly, low income household have much more significant housing cost shares of income compared to high income households. Quintile 1 is expected to reach an average housing cost share of income of 55.2 per cent by the end of 2023, having been as low as 36.8 per cent in 2021. Quintile 5 (highest income households) income share devoted to housing increases from around 13 per cent to nearly 20 per cent by 2023 year ending. The main driver, across the income distribution, of housing cost increases is the very significant interest rate increases beyond 2021. The increases in mortgage costs are well in excess of any increases either observed or projected in income. It should be noted that home ownership rates of Quintile 1 are much lower than higher income groups so their net impact on overall results is disproportionately lower than higher income groups on the overall result.

Figure 3 shows the same information as Figure 2 but for renter households. Overall, there has been a small reduction in housing costs in recent years for renters. This result is driven by incomes increasing more substantially than rents. While rent growth has been more substantial in 2022 and is projected to be even more substantial in 2023 it remains the case that rent growth (for all households using the ABS CPI for rents) was very low in the years prior to 2022 – even negative for some state capitals. In addition to low rental growth it is also the case that many renter households have experienced reasonably strong income growth through strong employment, low unemployment and welfare payments have been linked to the recently high CPI in addition to some policy changes that have also lifted the levels of some payments. The modelling also incorporates the Fair Work Commission's lift in award rates, typically by 5.75 per cent, which is above the expected rate of wage growth for other employees of 4 per cent (based on the most recent federal budget)[3].

[3] The underlying ABS survey data does not include information on who does and does not have an employment agreement that is linked directly to an award or minimum wage. It is assumed here that the moderately higher rate of growth for wages for those impacted (5.75% compared to a budget projected 4%) applies to the lowest 2.75 million individuals employed by their hourly wage rate. Not including the Fair Work Commission wage increase does not materially change the results in this paper.

Figure 3 Renter Household Housing Cost share of Income



The result for renter households may be an unexpected one. Much of the media discussion around rents is based on the much stronger growth in what are known as 'advertised' rents. A small number of rentals each month (or quarter) are advertised for new tenants and it has been the case that the growth in advertised rents has been quite strong. However, advertised rents are only a small share of all rents paid as most renters' rents are based on rental agreements made months or years in the past. Also, it's not always the case that advertised rents settle at the advertised rate or even that all properties are tenanted through advertisements. Around 1 in 10 rentals are let through the public or social housing systems and the rents paid by these tenants is typically related to some share of their income rather than a market based rate.

Figure 4 Household Housing Cost share of Income by income quintile

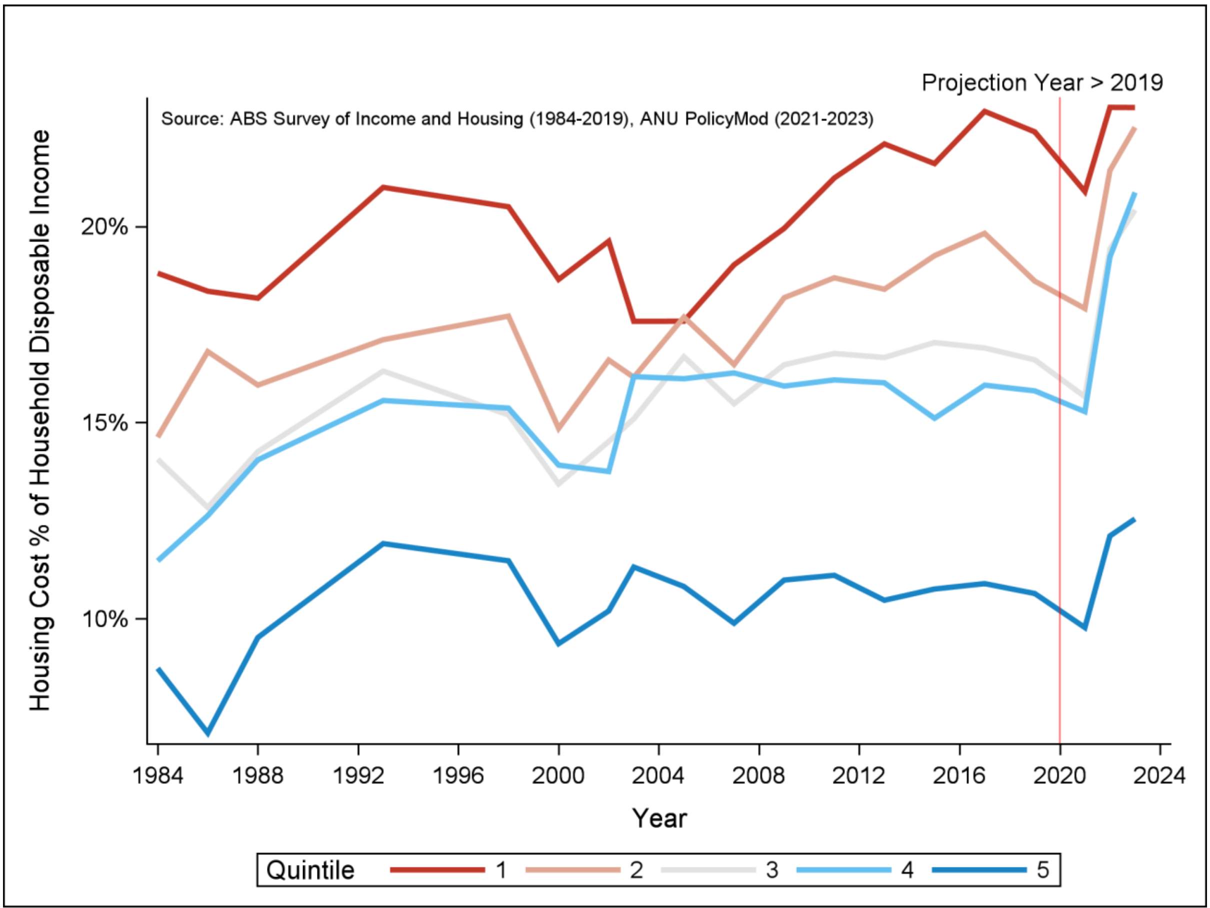


Figure 4 shows that low income households (Quintile 1 and Quintile 2) have, on average, much higher housing costs relative to their income than higher income households. All income groups are estimated to have increased their share of income devoted to housing costs since 1984. Between 1993 and 2019 housing costs have been reasonably stable across the income distribution.

PolicyMod projects that housing costs have increased quite dramatically for all except the bottom income quintile since 2019. This is the result of mortgagor households facing both much higher interest rates but also their more significant housing related debt levels. The largest increase through COVID (since 2019) is projected to be the middle income quintiles (Quintile 2 to Quintile 4). Quintile 1 is effectively unchanged with regard their housing cost share of income. The driver of this results is that Quintile 1 is composed of mostly renter households or households who own their house outright. These households have not experienced an increase in housing costs relative to incomes (on average). Many have also benefited from some employment growth and welfare payment indexation and policy related increases to base welfare payment rates. Middle income households are more likely to be mortgagor households and they have also experienced some bracket creep related increases in personal income tax and in 2022 the expanded low and middle income tax offset was removed.

Conclusion

As a share of income housing costs are at their highest rate since at least 1984. The key driver of this is mortgage interest rates and more significant debts compared to earlier decades. Rent costs have, as of 2023, not increased dramatically when averaged across all renter households.

Significant income increases in recent years, helped by strong employment growth and more generous welfare payments have also assisted households, particularly, lower income households. It still remains the case that low income households have considerably higher housing cost to income ratios than higher income households.

Mortgage costs have increased dramatically with recent increases in interest rates. For some households such increases are likely to mean significant financial stress or the need to rearrange household expenditure priorities. For some other mortgagor households the impact may be less of a problem as recent increases follow a decade of relatively low rates where some households built significant buffers with their mortgage and paid down debt levels.

The overall increase in housing costs will have very different implications for different households, but on average, the greatest shift has been towards much larger regular housing costs for mortgagors rather than renters. The sharp increase in 'advertised' rents has, to date, not transferred to the same magnitude to all households in terms of their actual rents paid. It remains the case that some renter households have experienced significant rent increases and it is yet to be determined at what point the upward cycle in rents (both advertised and all existing rents) will peak.

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