



How high inflation is affecting different Australian households

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High inflation can impact different groups differently

- High inflation has caused real incomes for Australians to go backwards
- But impacts differ across groups because of differences in consumption baskets, consumption buffers and savings buffers (as well as income changes)
- Some international evidence that inflation has increased inequality

Differences in effective inflation ('basket effects') have been small

- We find limited difference in effective inflation across household types
- BUT there are substantial measurement challenges

But inflation still has a disproportionate impact on more vulnerable households

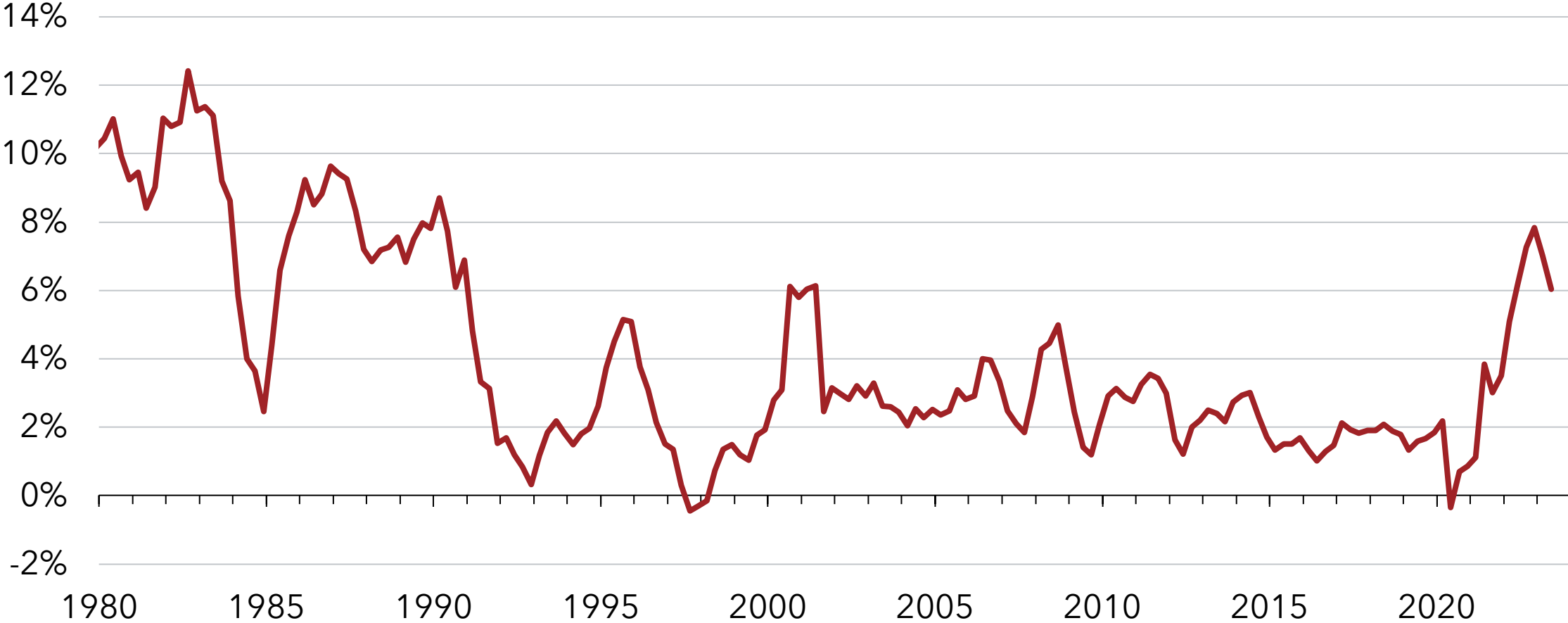
- Low income households have less discretionary consumption and also smaller savings buffers
- Impacts have been moderated amongst more vulnerable households by better labour market outcomes
- But overall levels of financial stress remain elevated and growing for those on lowest incomes

Lessons learned

- The disproportionate squeeze on the vulnerable is another reason to worry about inflation
- Any government action to 'ease the squeeze' should focus on the most vulnerable
- Better data is needed (ABS 🙏)

Australia is currently experiencing its highest inflation in over three decades

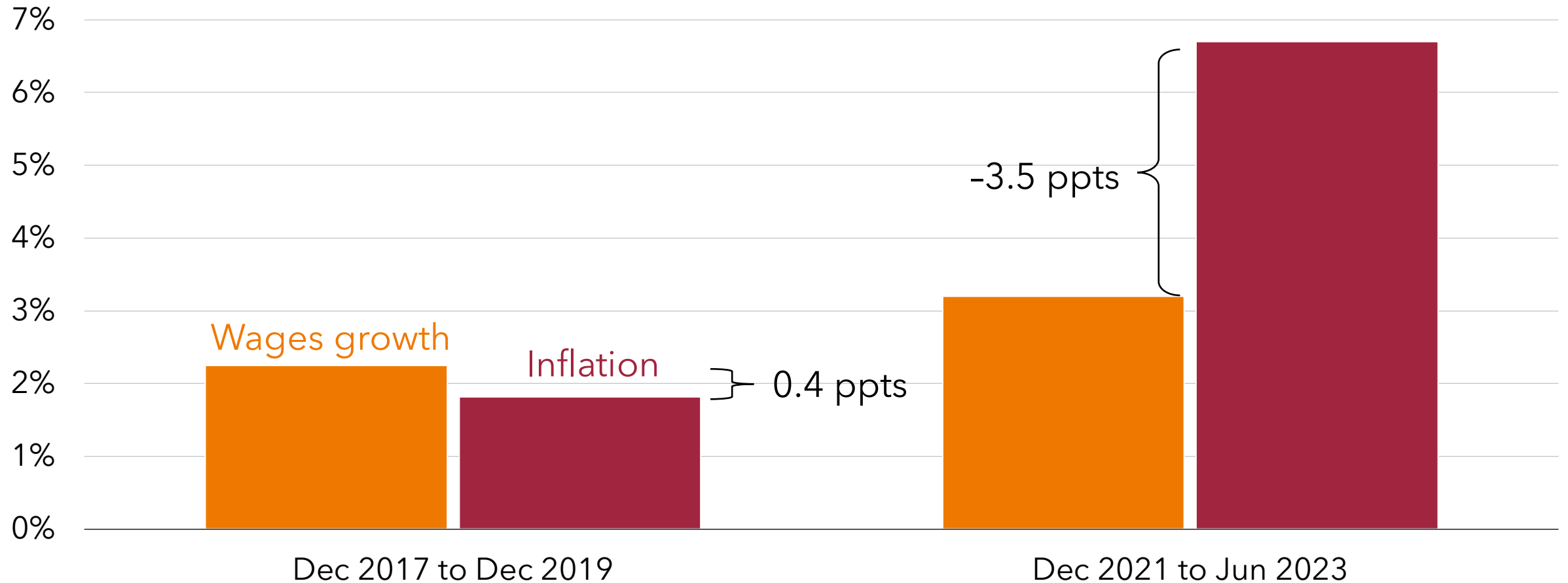
Annual consumer price inflation



Source: ABS (2023), Consumer Price Index, Australia (June quarter).

Real wages have gone backwards

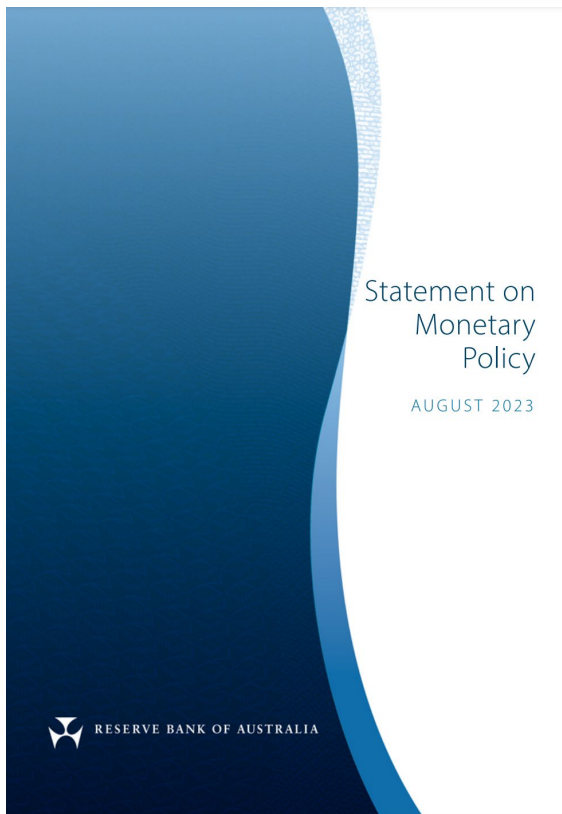
Annualised changes in the CPI and WPI



Note: The wage price index (WPI) measure used is the hourly rate of pay excluding bonuses.

Sources: ABS (2023), Consumer Price Index, Australia (June quarter); ABS (2023), Wage Price Index, Australia (June quarter).

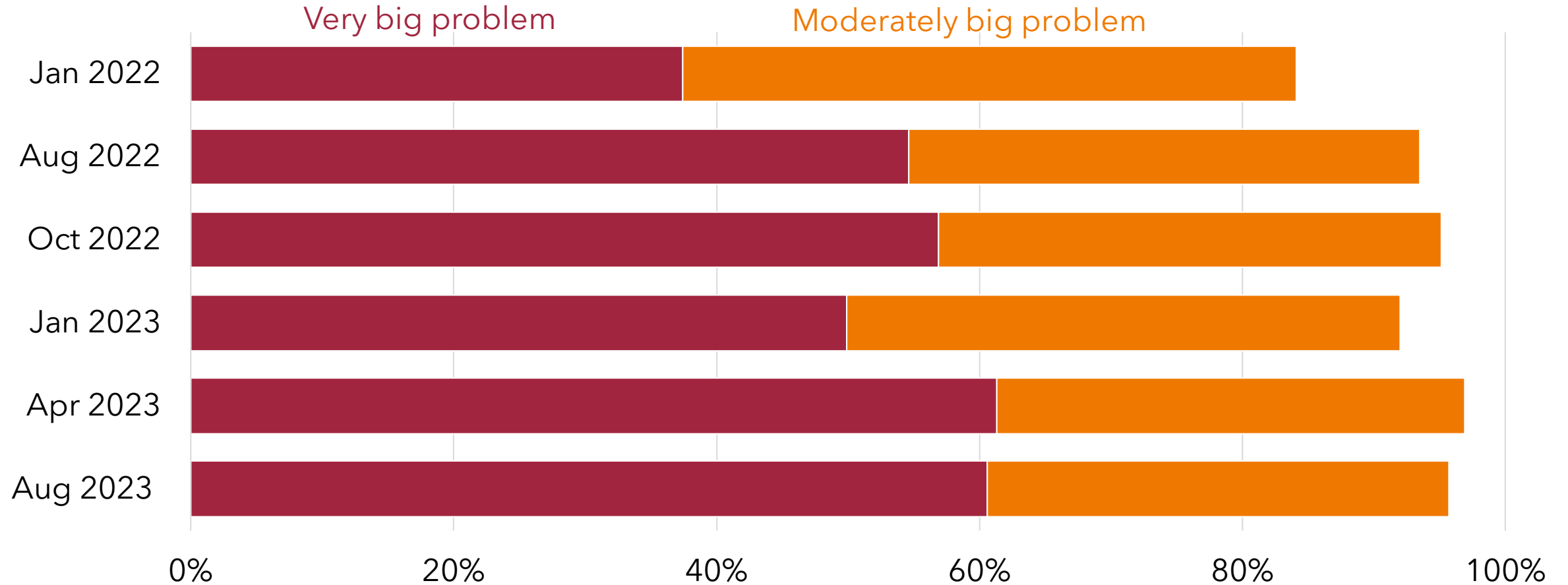
Although employment income has grown more



Across all quintiles, nominal employment income growth has been stronger than base wages growth, which likely reflects increases in hours worked (especially for those on lower incomes), people switching to higher paid jobs or receiving promotions, and firms offering additional payments such as overtime or cost-of-living bonuses.

Households increasingly report price rises are a 'very big problem' for them

Percentage of people that nominate price rises as a 'very big' or a 'moderately' big problem



But inflation can impact different types of households differently

There are several reasons why high inflation may impact different types of households in different ways

- **Basket effects** - Different households consume a different mix of goods and services
- **Consumption buffers** - Different households have different amounts of 'fat' in their consumption baskets. Households that consume a higher proportion of essentials and more lower cost versions of goods have less opportunity to shift consumption patterns without cutting into spending on essential items
- **Savings buffers** - Households have different capacity to buffer sharp increases in their living costs through reducing savings or drawing down on wealth.
 - Inflation also reduces the purchasing power of wealth - but this is out of scope for our paper.

Also, less directly, inflation may impact differently if **income changes** in response to inflation different systematically across groups

Why does it matter? Inflation may worsen inequality



"If inflation stays high, it's very damaging for the economy. It worsens income inequality. It makes it harder for people to plan. It erodes the value of savings. It's corrosive to the economy"

Philip Lowe, testimony to Senate Economics committee, 15 February 2023

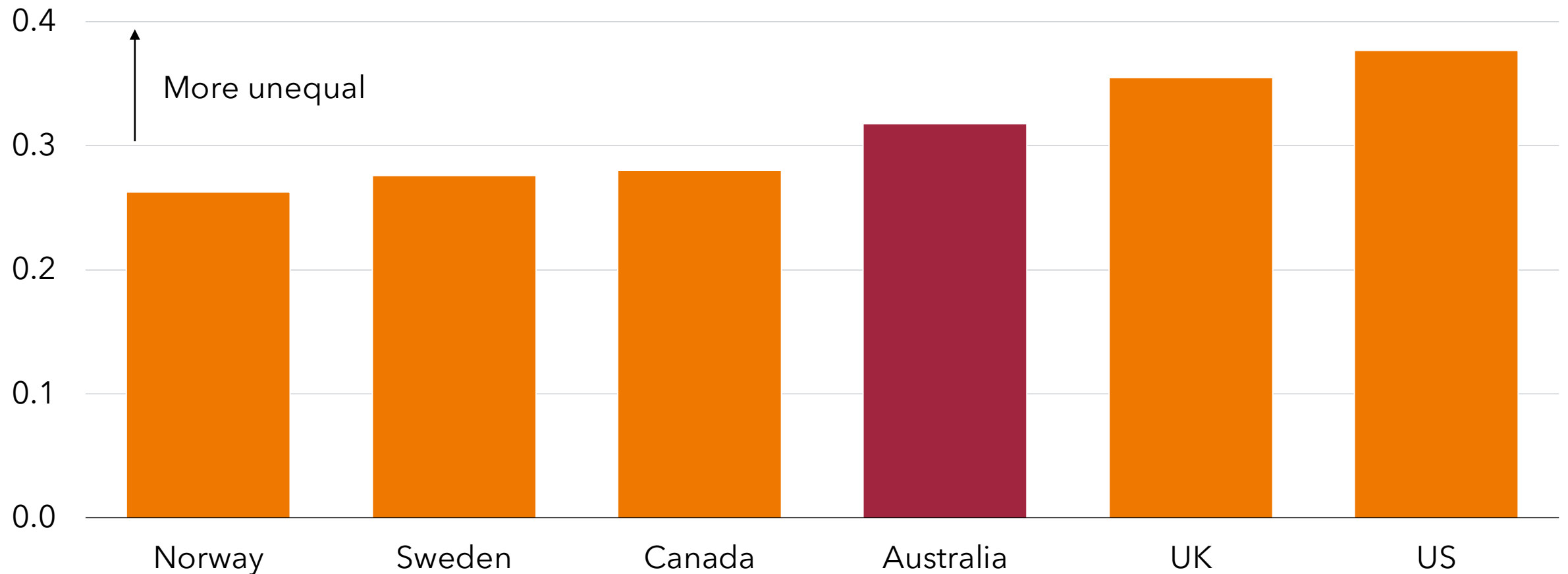


"Working people are struggling to keep their heads above water, with inflation outpacing wages growth by more than double the rate. The people worst affected by ongoing inflation are those earning the minimum wage and award wages"

Sally McManus, Secretary of the ACTU, 31 May 2023

Inequality already a challenge in Australia

Gini coefficient of equivalised disposable household income, 2020

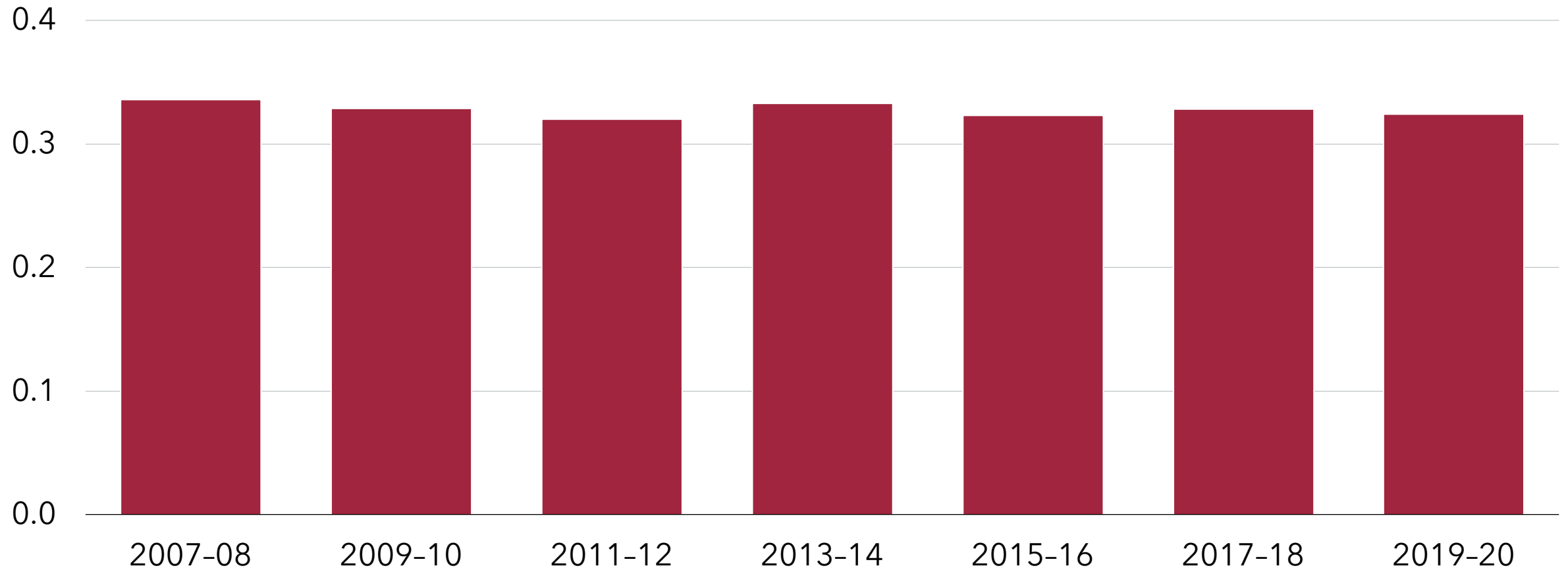


Notes: Survey estimates for 2020 are subject to additional uncertainty and are to be treated with extra caution, as in most countries the survey fieldwork was affected by the pandemic.

Source: OECD.Stat, Income distribution database

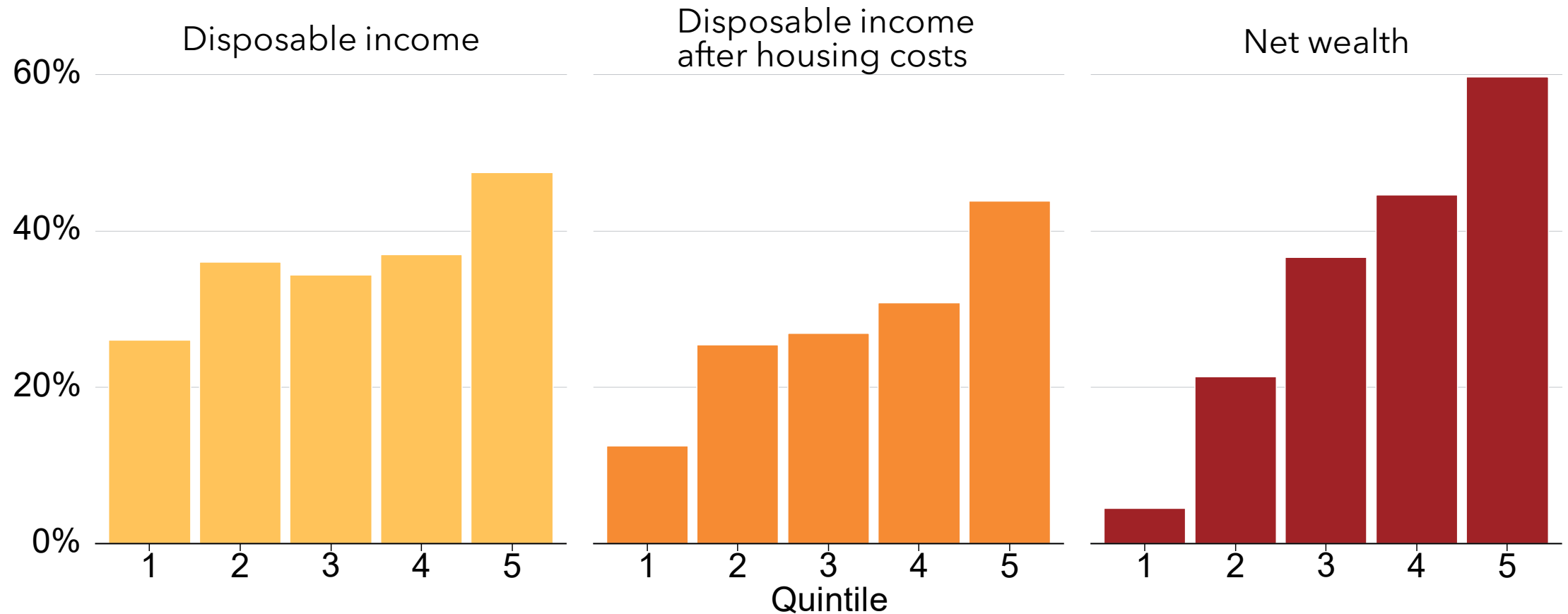
Pre-COVID, income inequality was relatively stable overall

Gini coefficient of equivalised disposable household income



Although after housing costs was more pronounced

Real growth from 2003-04 to 2019-20, equivalised households

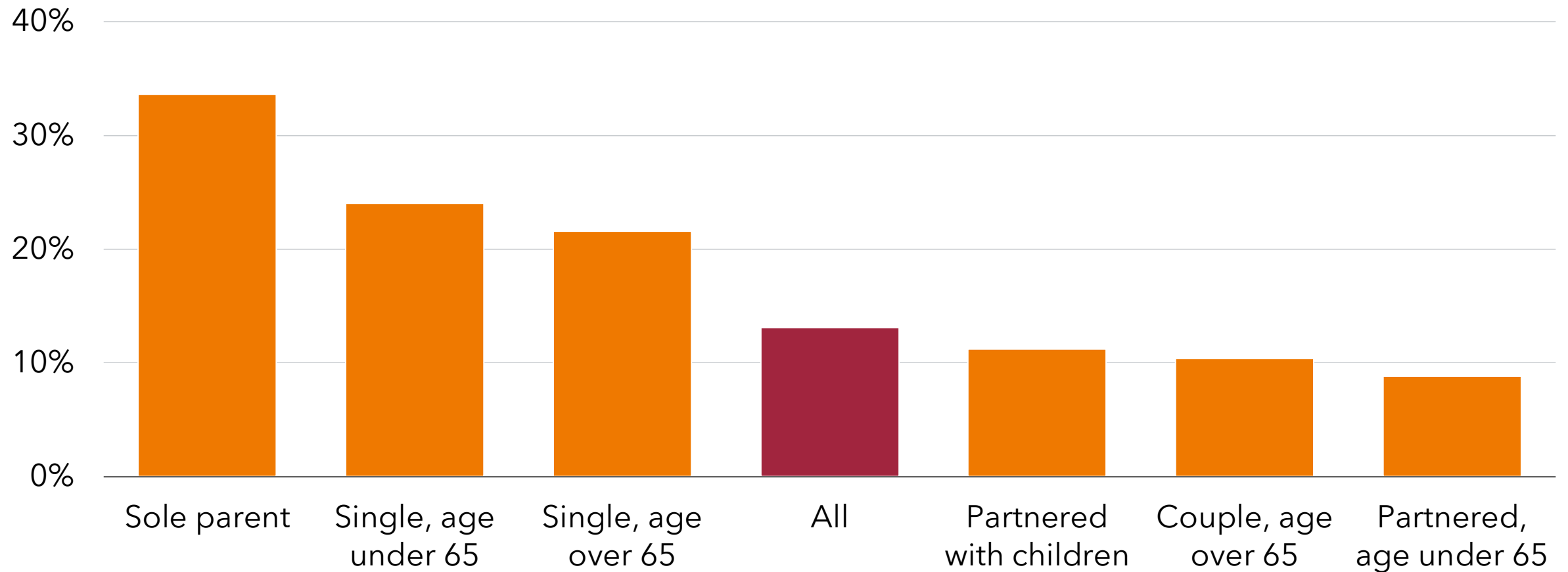


Notes: Growth in income excluding housing costs calculated by subtracting growth in housing costs from growth in disposable income. Quintiles are calculated as the mean of disposable income quintiles, except for net wealth which is calculated on net wealth quintiles. Housing costs use the standard Survey of Income and Housing measure of housing costs, which includes rent and mortgage repayments.

Sources: ABS Survey of Income and Housing microdata (2003-04, 2019-20), ABS Household Income and Wealth (2013-14, 2019-20).

Poverty is a particular concern

Poverty rate, 2019-2020



Note: Poverty defined as living below 50 per cent of median after-housing equivalised disposable household income.

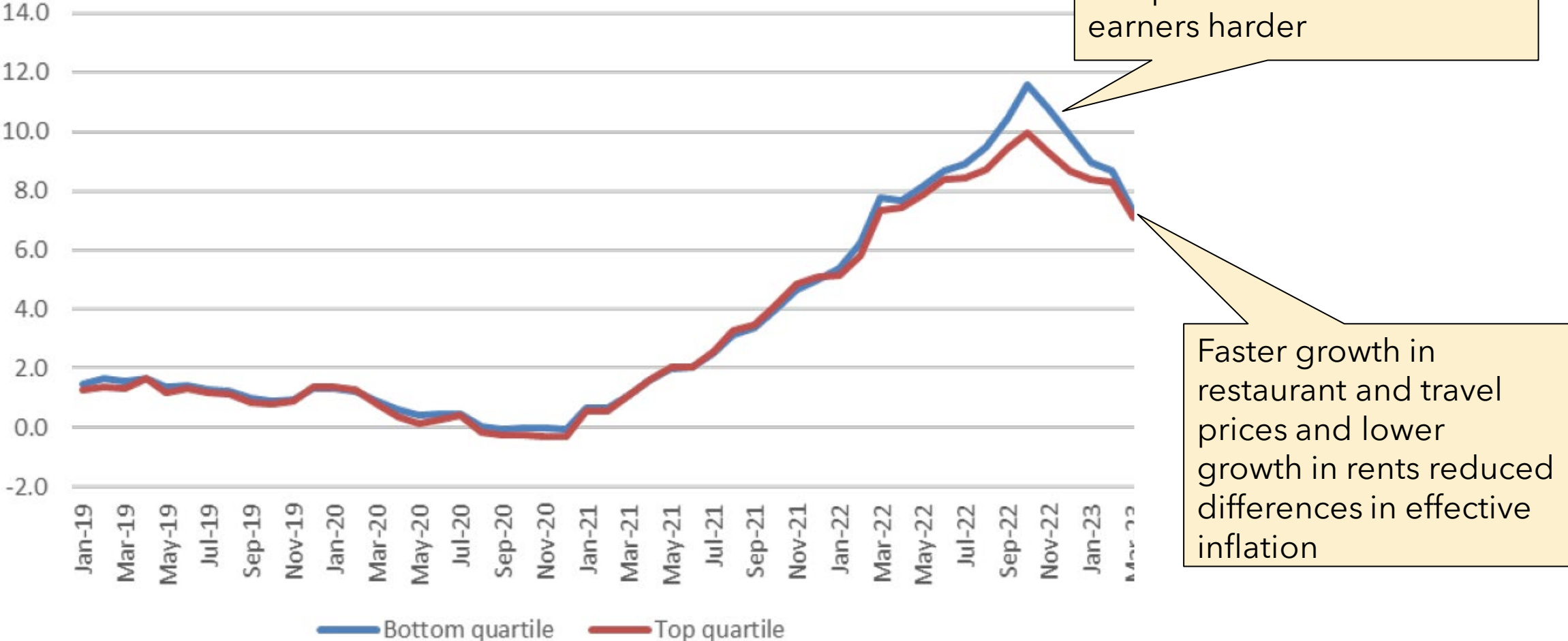
Source: UNSW and ACOSS 2023, *Poverty in Australia*, based on ABS Survey on Income and Housing.

Research on the impact of recent inflation in Europe on different households has been mixed

Study	Effects studied	Finding
European Central Bank (2023)	Basket effects - to end of 2022	<ul style="list-style-type: none"> Estimate and almost 2 percentage point differential in the inflation rates experienced by the highest and lowest quintiles of income earners, as the result of higher energy and food prices through 2022
	Savings buffers	<ul style="list-style-type: none"> Low-income households have substantially less room to buffer sharp increases in their cost of living through savings.
World Bank (2023)	Basket effects - to end of 2022	<ul style="list-style-type: none"> Households in the poorest decile of the consumption distribution faced effective inflation 2.3 percentage points higher than those households in the top decile in 2022. The difference reached more than 5 percentage points in some countries
European Parliament (2023)	Basket effects to first quarter of 2023	<ul style="list-style-type: none"> Find little difference in the impact of current inflation on high and low income households across the Euro area in 2023 Disproportionate impact on low income households from higher energy and food prices largely offset by higher prices of luxury goods (restaurants and travel) and relatively low growth in rents Although differential still persist in some countries e.g. Italy and Latvia
	Income changes	<ul style="list-style-type: none"> In large euro area countries wages have increased somewhat more in low-wage sectors, reducing income inequality

In Europe, shifts in relative prices initially hit low income earners harder but that has now dissipated

Estimate of effective inflation for top and bottom income quartile, euro area



Note: GDP weights are used for calculating the euro area average.

Source: Gros and Shamsfakhr (2023), *Inflation and Inequality: Energy and food versus rents*, Figure 2.

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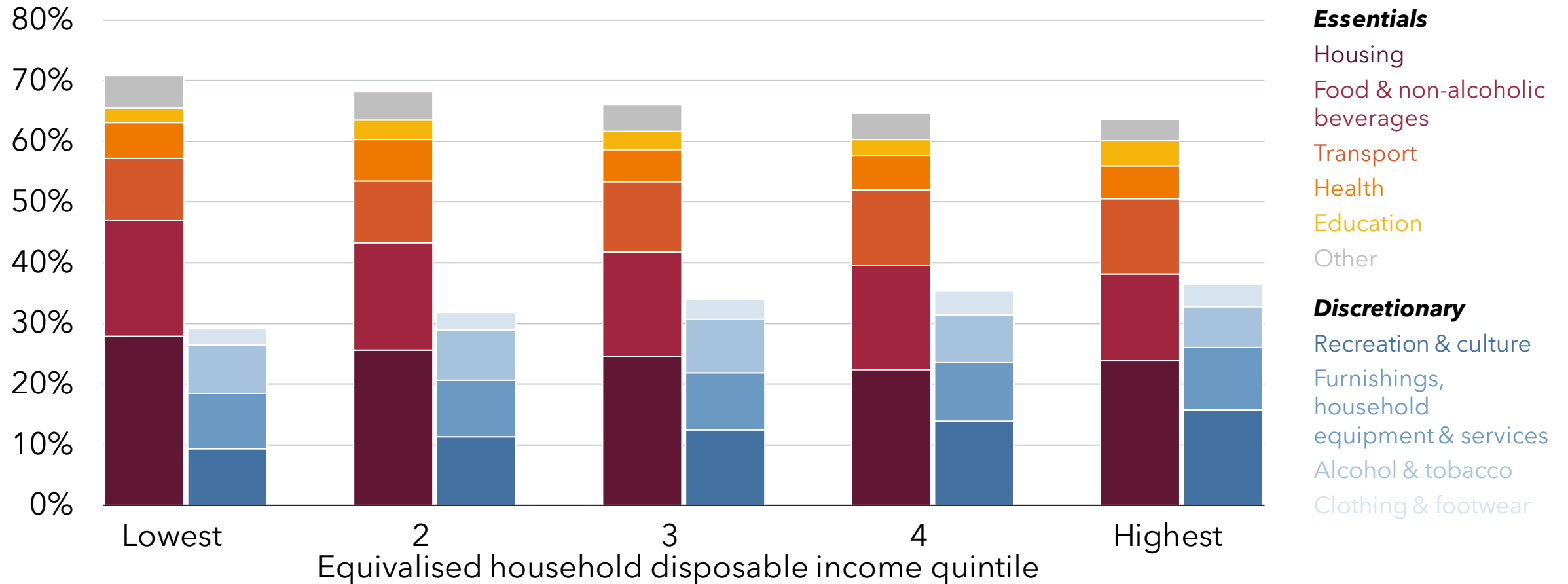
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- Impacts have been moderated amongst more vulnerable households by better labour market outcomes
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Lessons learned

- The disproportionate squeeze on the vulnerable is another reason to worry about inflation
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- Better data is needed (ABS 🙏)

Different household types have different consumption baskets

Share of basket by spending category across income quintiles, 2017

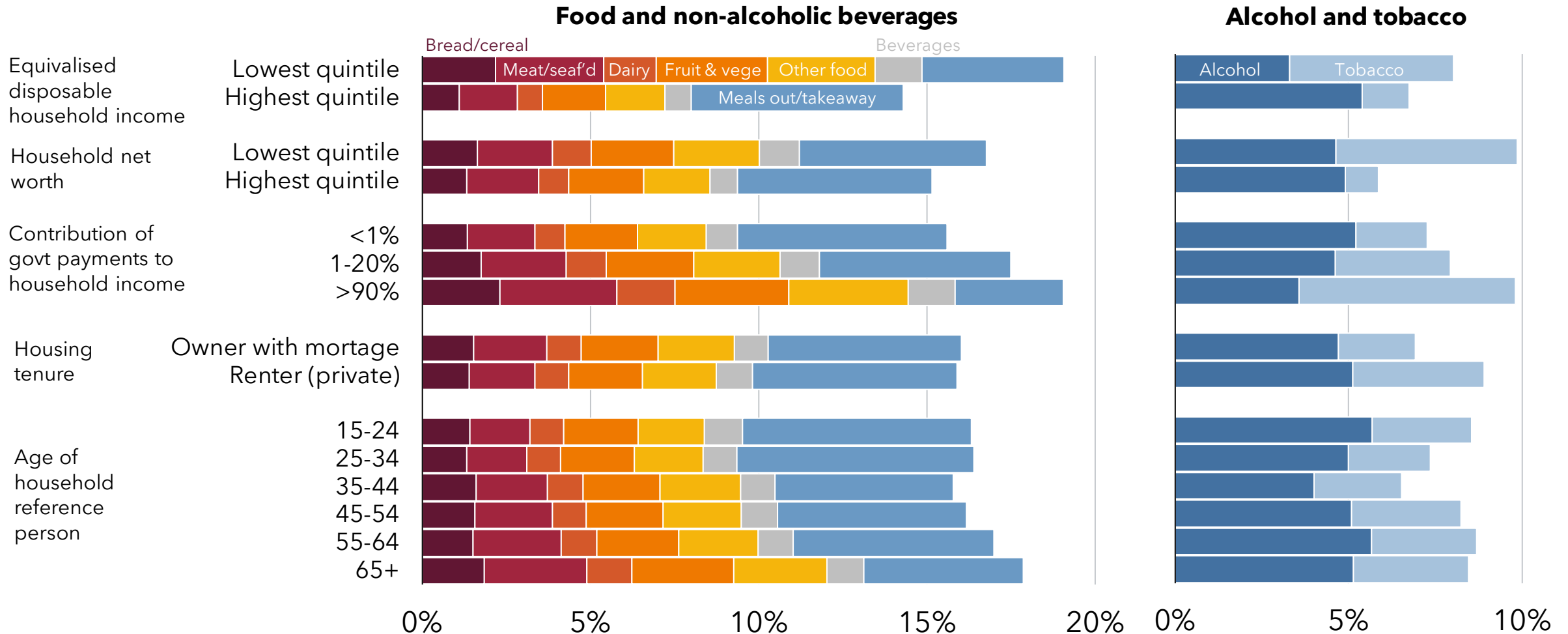


Notes: Weights are constructed by mapping 2015-16 HES data to CPI categories, and price-updating to the September 2017 quarter (see Appendix A for details); weights will differ from those of the CPI because not all expenditure classes can be mapped. The lowest equivalised household disposable income quintile excludes the first and second percentiles.

Sources: Grattan Institute analysis of ABS (2017a), Tables 3.3A and 4; ABS (2017b), Table 5; ABS (2018a), Table 3; and ABS (2023), Table 7.

And there are also sizeable differences within categories

Composition of selected items in the consumption basket, share of total basket in 2017

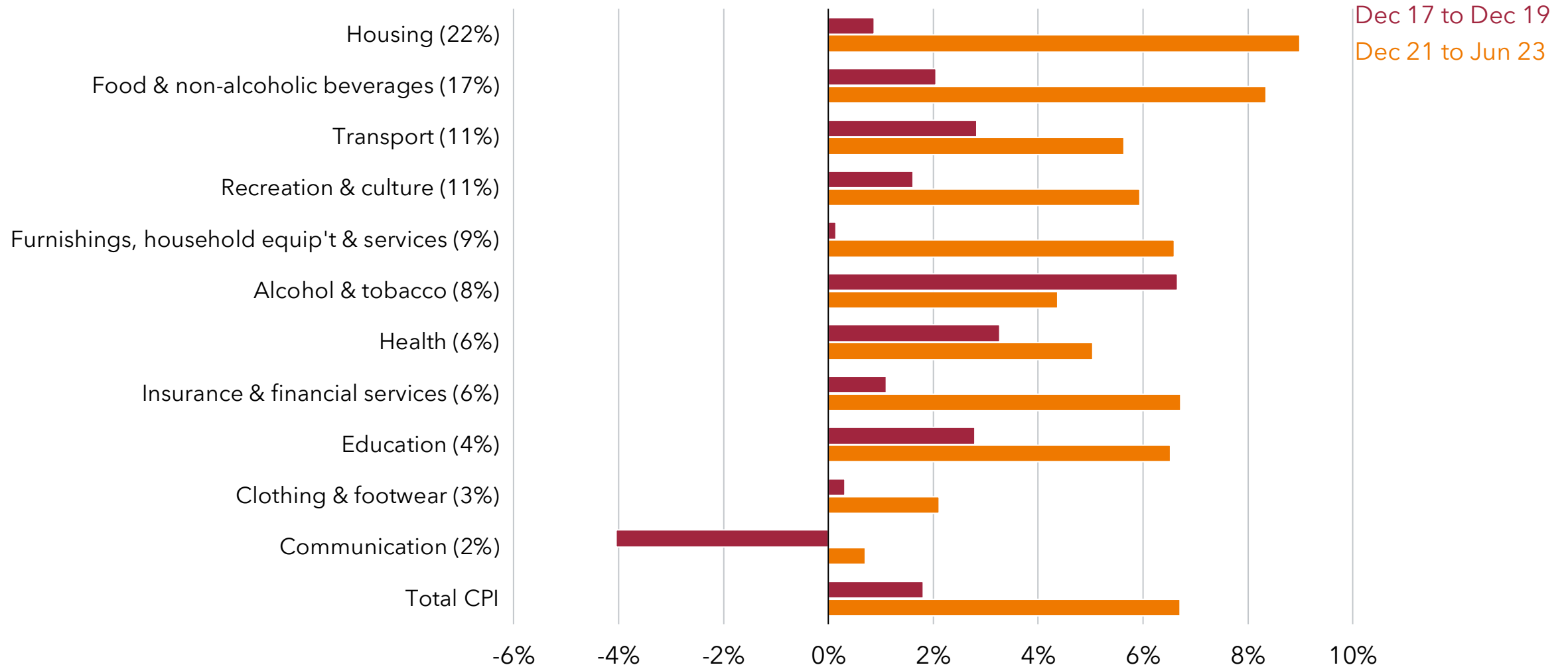


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Sources: Grattan Institute analysis of ABS (2017a), Tables 3.3A and 4; ABS (2017b), Table 5; ABS (2018a), Table 3; and ABS (2023), Table 7.

And prices in different categories have grown by different amounts

Annualised price change in CPI groups



Note: Numbers in parentheses are shares in the CPI 'basket' as at December 2022.

Sources: ABS (2022a and 2023a).

What do we know about inflation inequality from the literature?

Aggregated survey data

- Evidence for modest difference in inflation across household groups
 - McGranahan and Paulson (2006); Hobijn and Lagakos (2005); Crawford and Smith (2002)
- Limited by aggregation bias; findings depend on degree of disaggregation
 - Jaravel (2019)
- Australian studies to date
 - Van Kints and Breunig (2021); Yuen and Rozenbes (2022); Jacobs, Perera and Williams (2014)

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Scanner data

- More robust evidence for inflation inequality
 - ↓ inflation with ↑ income deciles: Jaravel (2019)
 - Wide dispersion even within same items: Kaplan and Schulhofer-Wohl (2017)
 - Inequality widens during crises: Argente and Lee (2020)
- But limited to fast-moving consumer goods...

Calculating effective inflation rates for different households

We use:

- Detailed expenditure from 2015-16 HES (>800 items) for selected household groups
- Mappings from HES to 85 (of 87) CPI expenditure classes
- Assumptions for a few missing and incomplete items
- Adjustments from annual CPI weights + chain-linking

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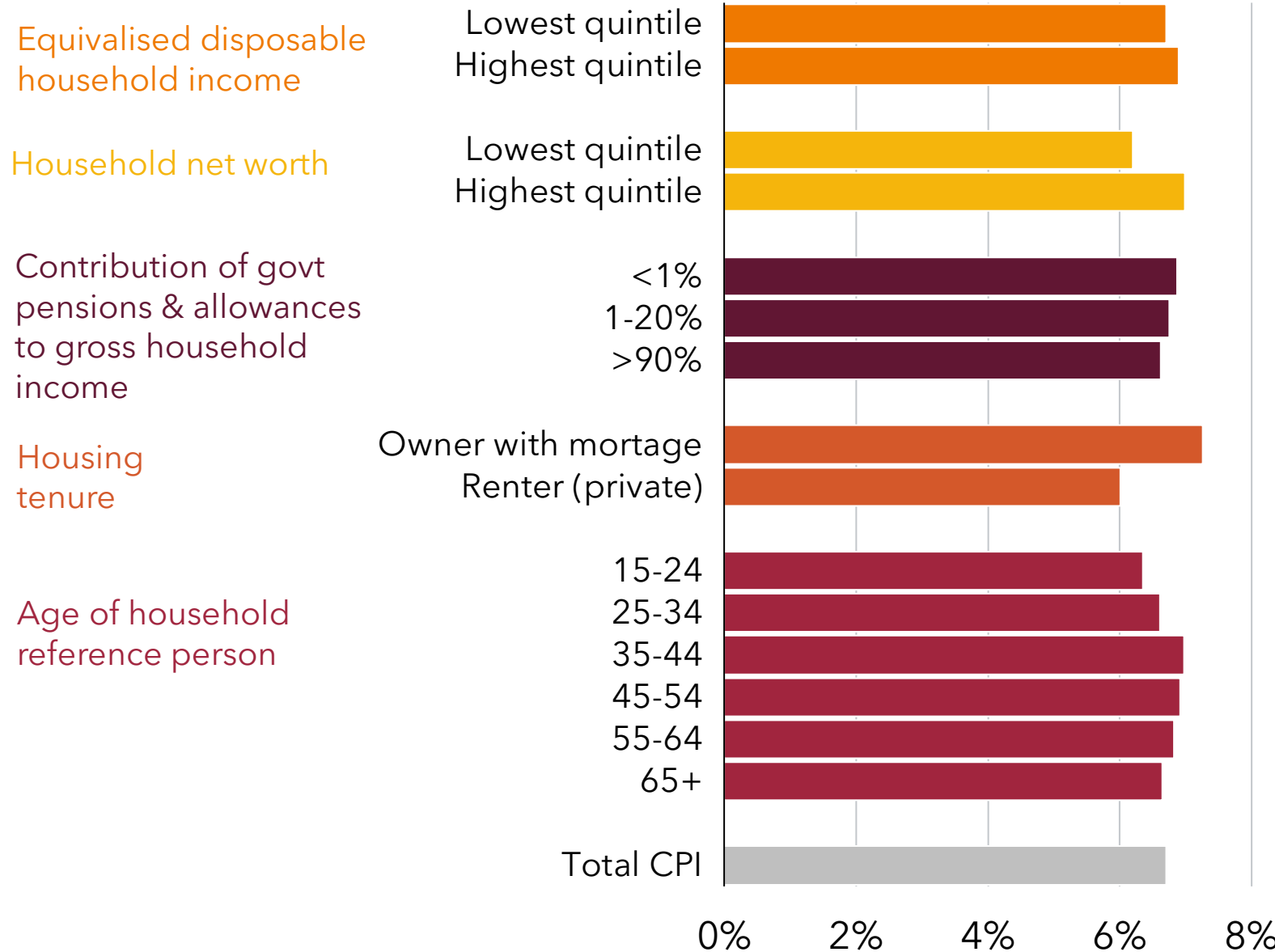
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(Necessary) assumptions:

- Same consumption within each expenditure class, at same average price
- Extent of under-reporting same across household types for incomplete items
- All households shift consumption by the same proportion in given year

What did we find? Overall effective inflation rates are pretty similar across household groups

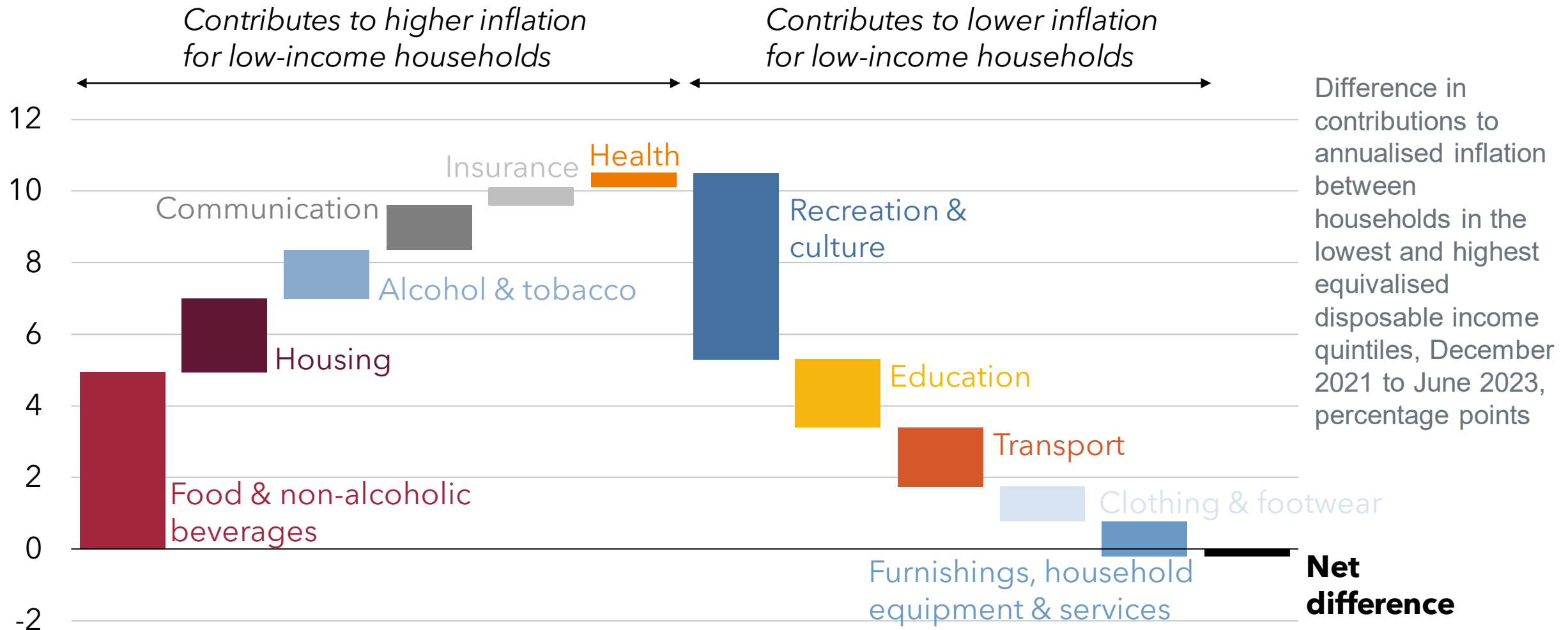


Annualised CPI inflation from December 2021 to June 2023

Note: The lowest equivalised disposable household income quintile excludes the first and second percentiles.

Sources: Grattan Institute analysis of ABS (2017a, 2017b, 2018a, 2018b, 2019b, 2020, 2021, 2022a, and 2023a).

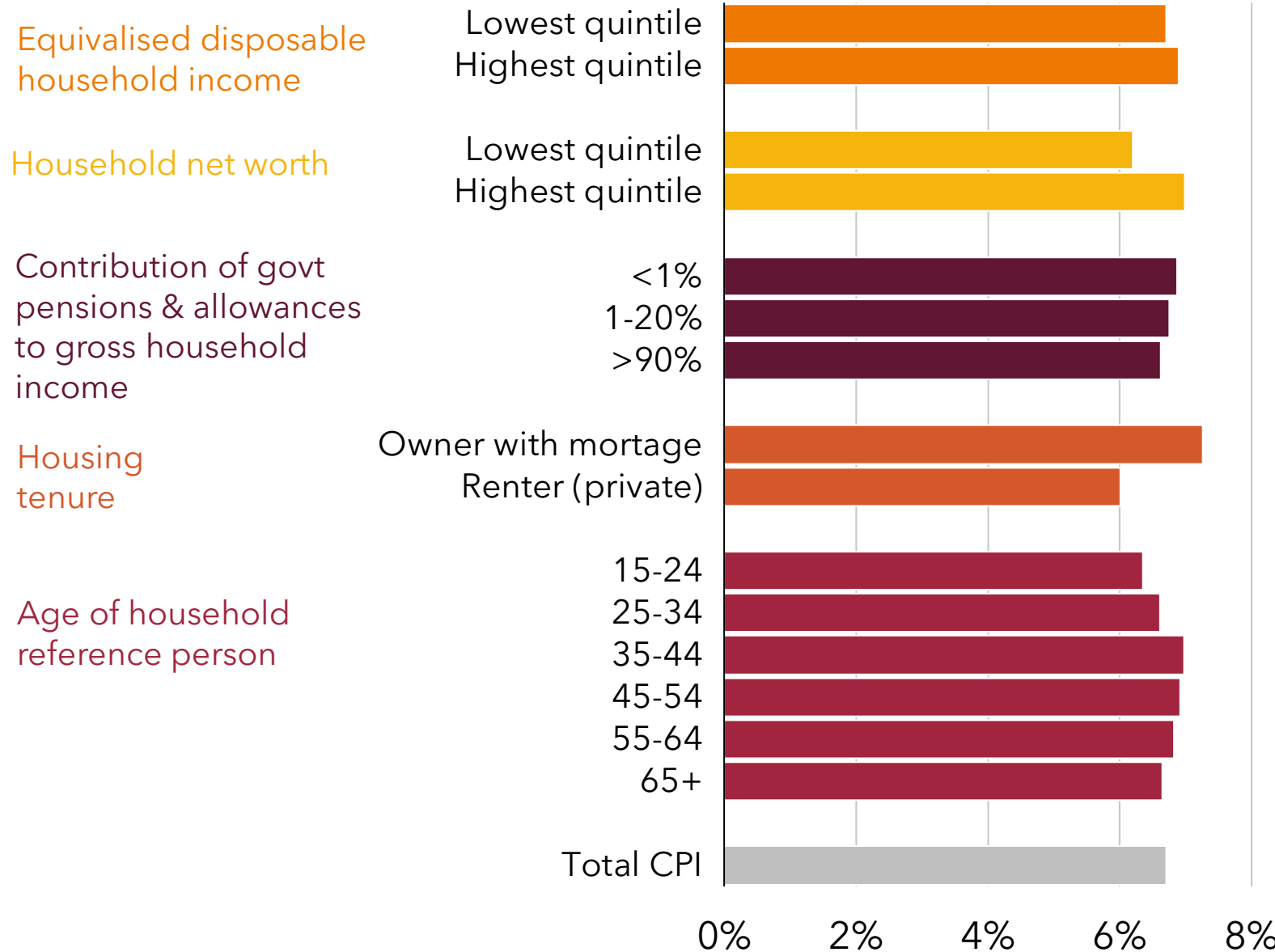
Impact of different components larges washes out across income groups



Notes: Index point contributions for each household type are approximated by multiplying the 2022 CPI expenditure class weights with the estimated index for each household type (see Appendix A for details). The lowest quintile for equivalised disposable income excludes the first and second percentiles.

Sources: Grattan Institute analysis of ABS (2017a, 2017b, 2018a, 2018b, 2019b, 2020, 2021, 2022a, and 2023a).

Housing driving some unusual results

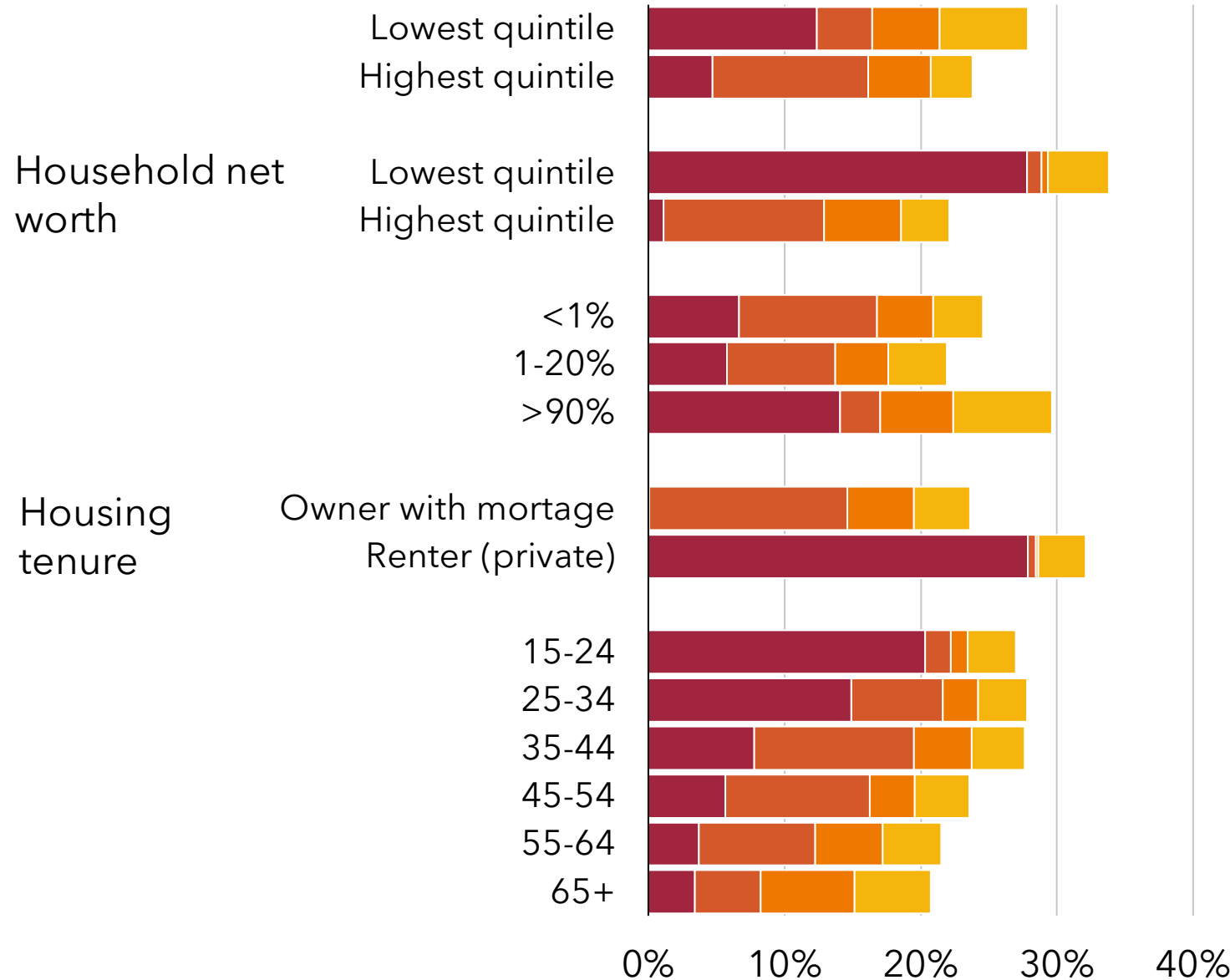


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Households consume very different housing baskets



Rents

New dwelling purchase by owner-occupiers

Other housing

Utilities

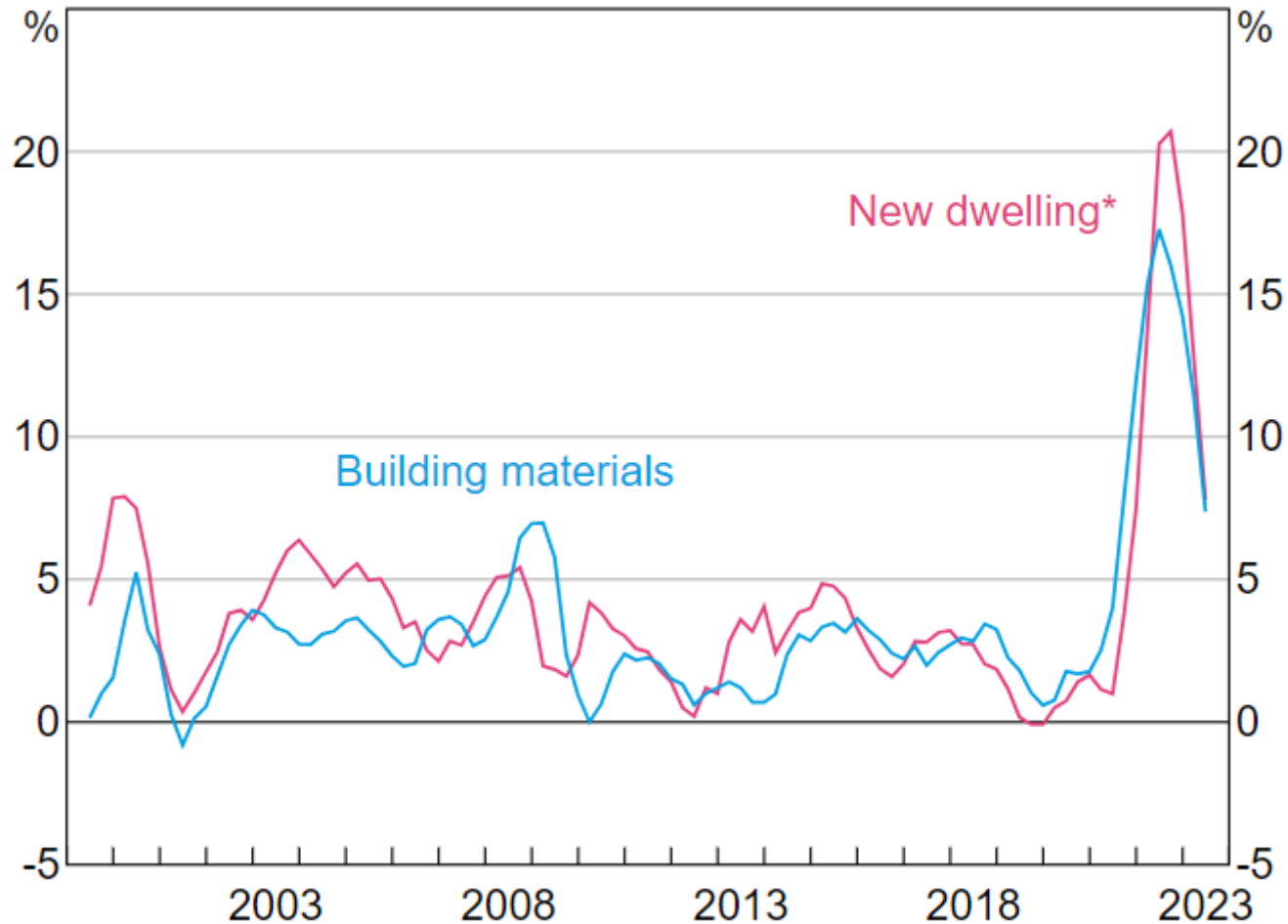
CPI basket weights as at September 2017

Notes: Weights are constructed by mapping 2015-16 HES data to CPI categories, and price-updating to the September 2017 quarter (see Appendix A for details); weights will differ from those of the CPI because not all expenditure classes can be mapped. The lowest equivalised household disposable income quintile excludes the first and second percentiles.

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Owner-occupier effective inflation being driven by big increases in price for new home construction

New dwelling and building materials inflation, year-ended



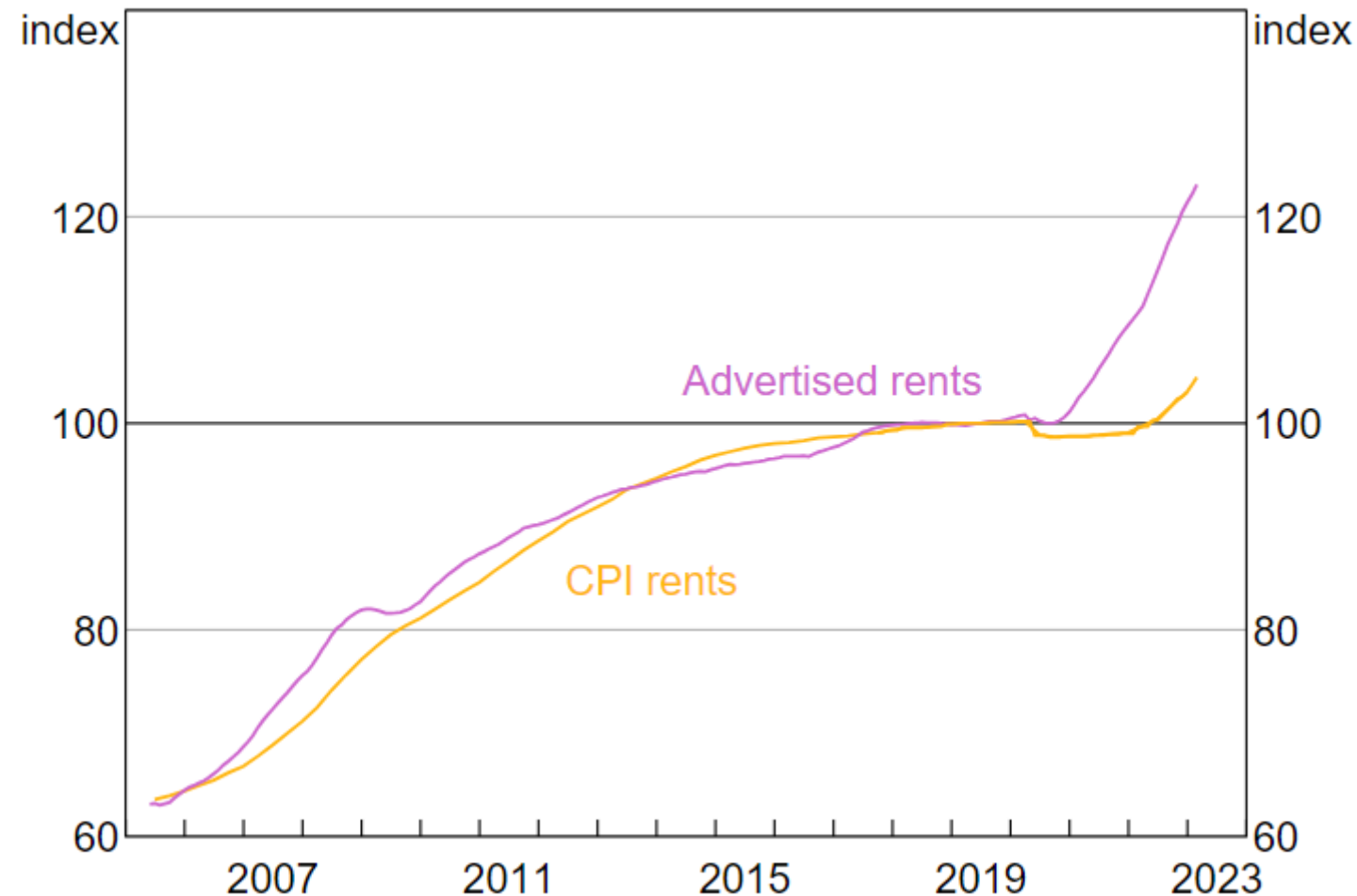
BUT less than 1% of owner-occupier households buy a newly constructed home each year so vast majority do not 'feel' this inflation

Note: adjusted for the tax changes of 99-00

Source: RBA (2023), *Statement on Monetary Policy*, August, Graph 4.6.

And rents lag in their feed through to CPI so effective inflation will be higher for longer for renters

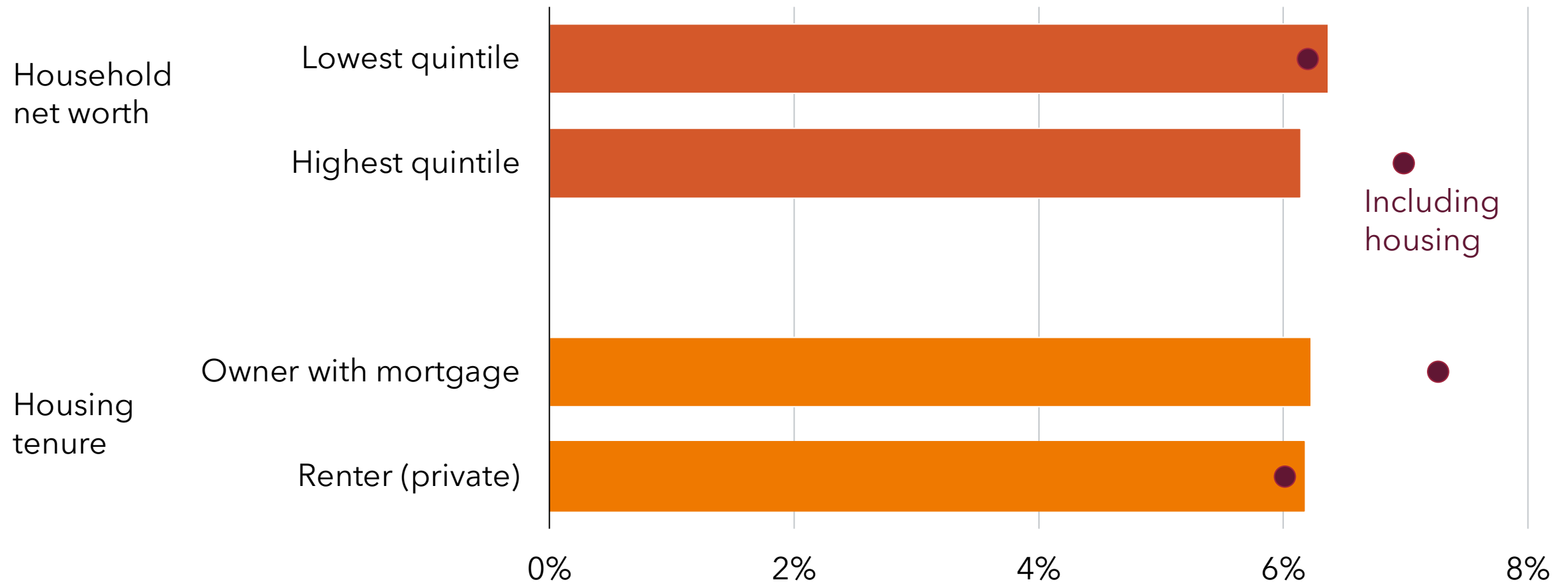
Rents, June 2019 = 100



Source: Hanmer and Marquardt (2023), 'New Insights into the Rental Market', *RBA Bulletin*, June, Graph 2.

Excluding housing, inflation rates are also similar across household net worth and housing tenure

Annualised CPI inflation excluding housing, December 2021 to June 2023

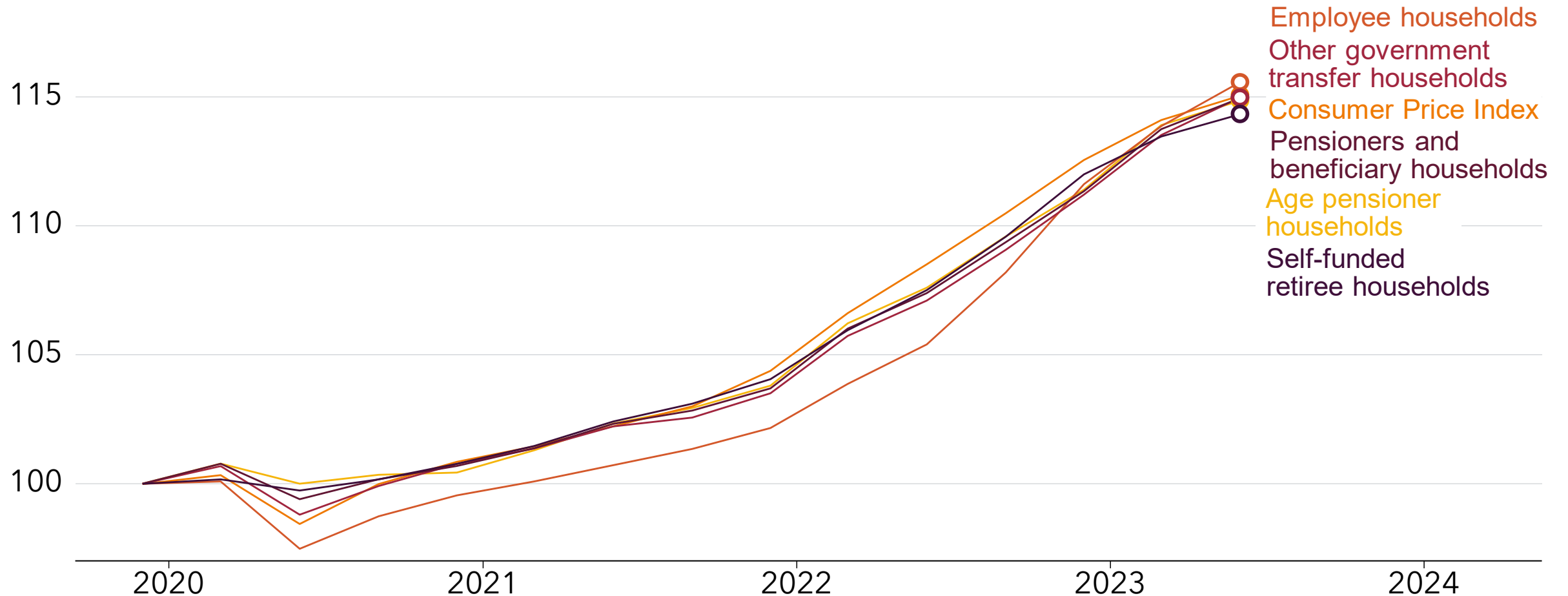


Notes: The red bars are effective inflation rates excluding new dwelling purchased by owner-occupiers, maintenance and repair of the dwelling, and property rates and charges; utilities are included.

Sources: Grattan Institute analysis of ABS (2017a, 2017b, 2018a, 2018b, 2019b, 2020, 2021, 2022a, and 2023a).

Overall conclude basket effects are small Also consistent with cost-of-living indexes

Cost of living indexes, 100 = Dec 2019



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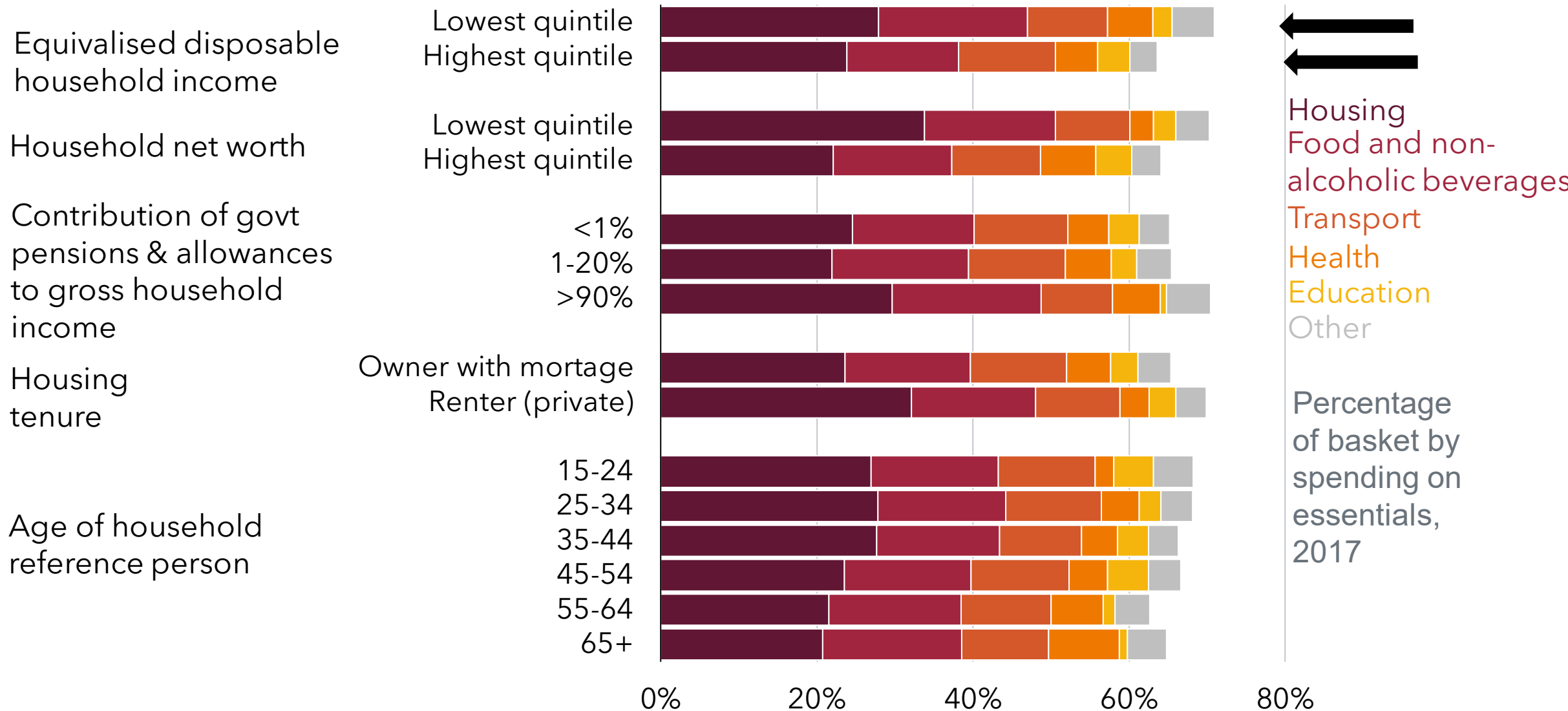
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Essentials are a higher share of basket for more vulnerable households

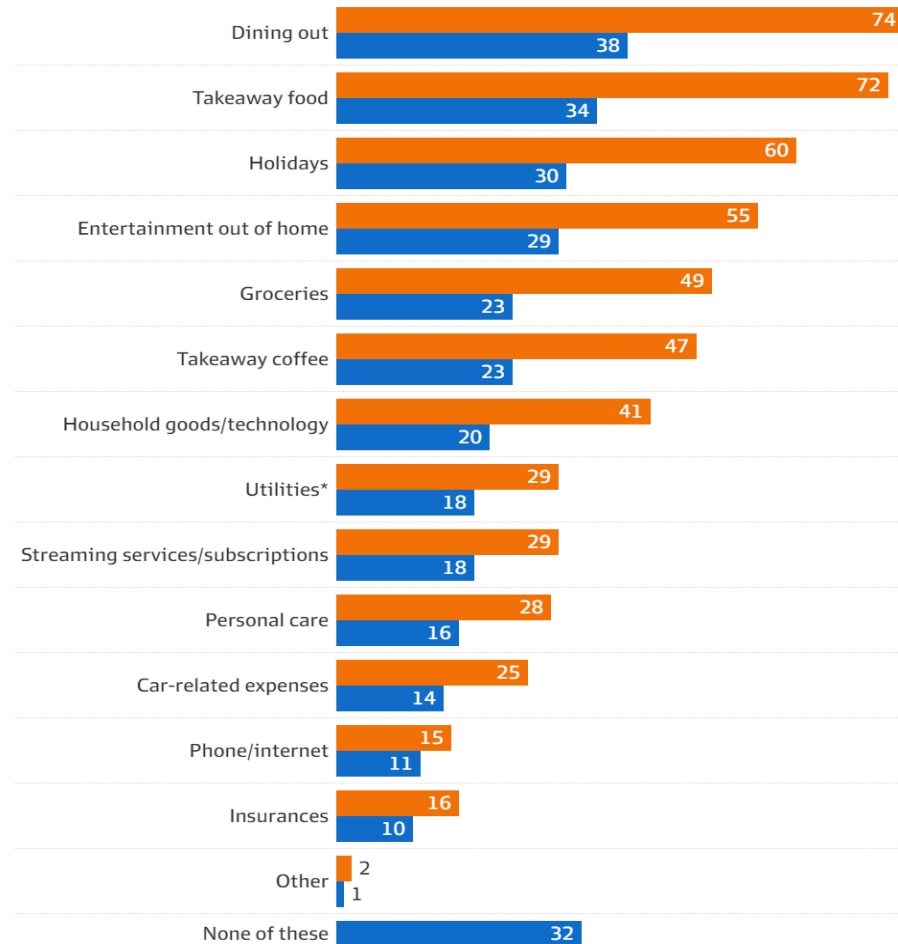


That means less fat before essentials gets squeezed

Percentage of mortgage holders cutting costs by category

Where people are cutting costs (%)

Already cut back Planning to cut back



In contrast.....



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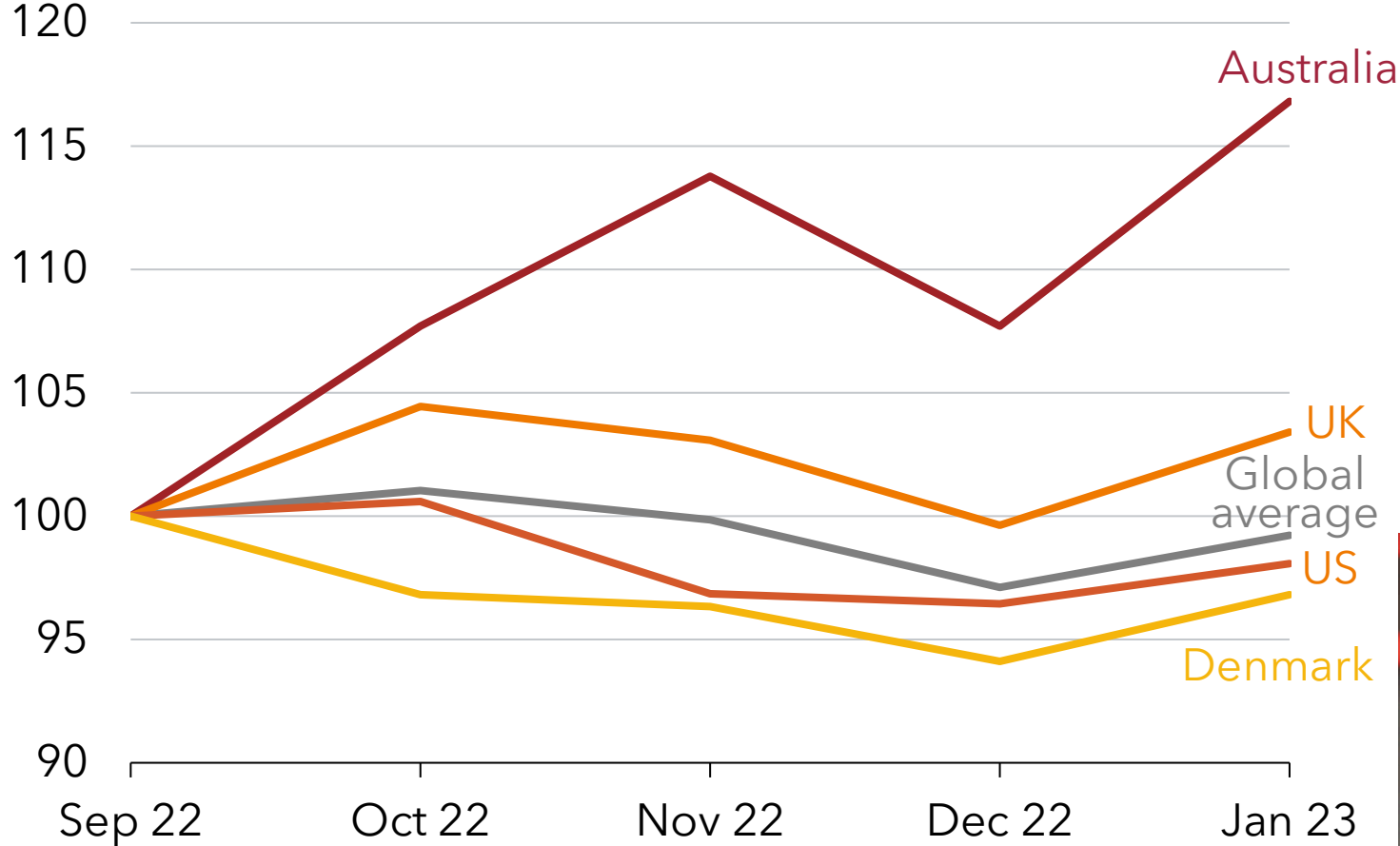
[RESOURCES](#) ▾

People on low incomes forced to skip meals as cost of living bites

📅 4 September 2023

Australians are also substituting within essential categories, particularly food

Food frugality index, September 2022 = 100



“in areas like pasta and rice and oil where we have seen home-brand trade particularly strongly and shoppers trade out of proprietary (brands). ...

Some shoppers are also trading to cheaper cuts of meat from more expensive cuts like steak.”

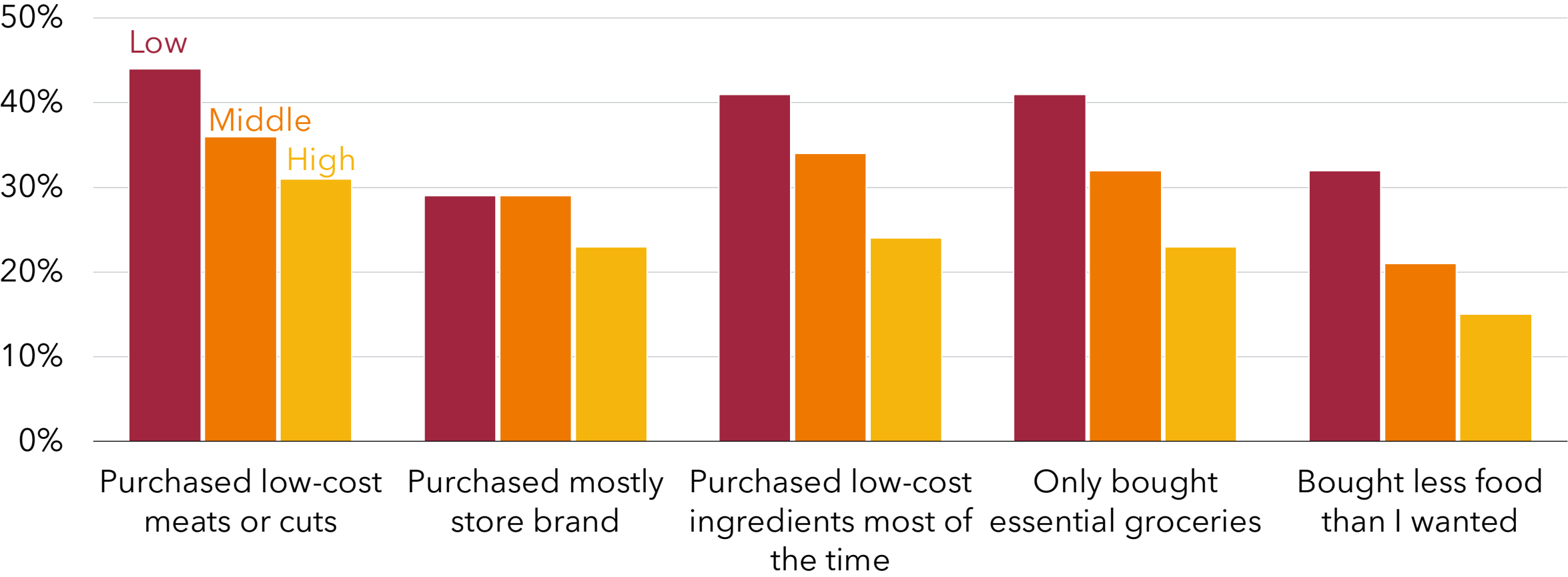


Leah Weckert, Comes CEO, April 2023

Notes: Sample = 23,000 per monthly study wave
Sources: Deloitte State of the Consumer Tracker, January 2023

But less room for lower-income households who were already making more budget friendly choices

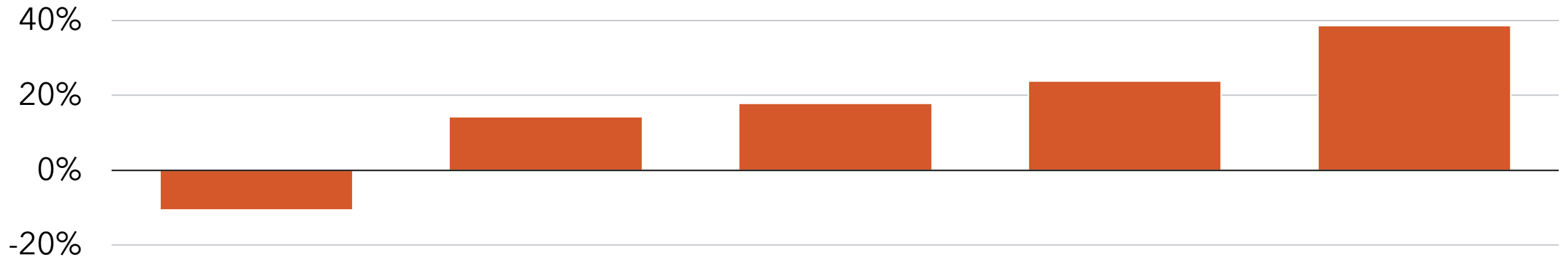
Proportion of consumers, by income



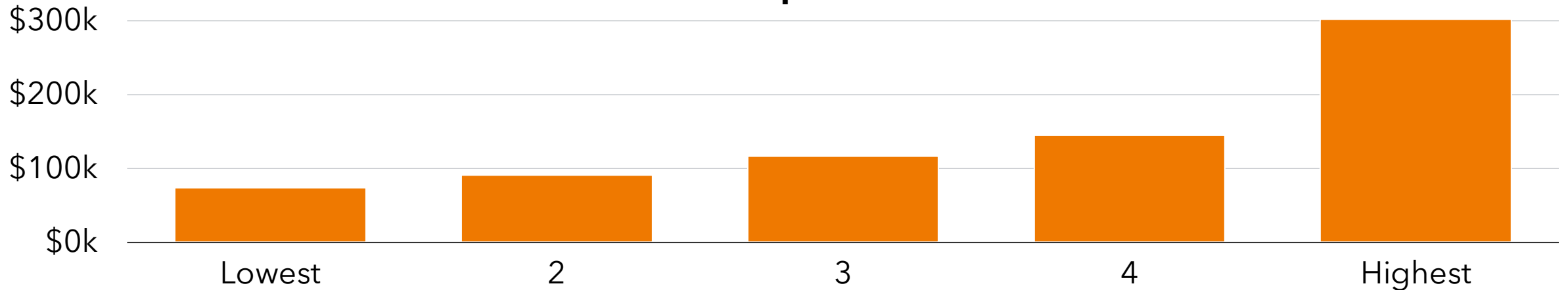
Source: Deloitte (2023), *Global State of the Consumer Tracker*, 28 August.

Lower-income households also have less savings buffers

Saving as a share of disposable income



Liquid assets



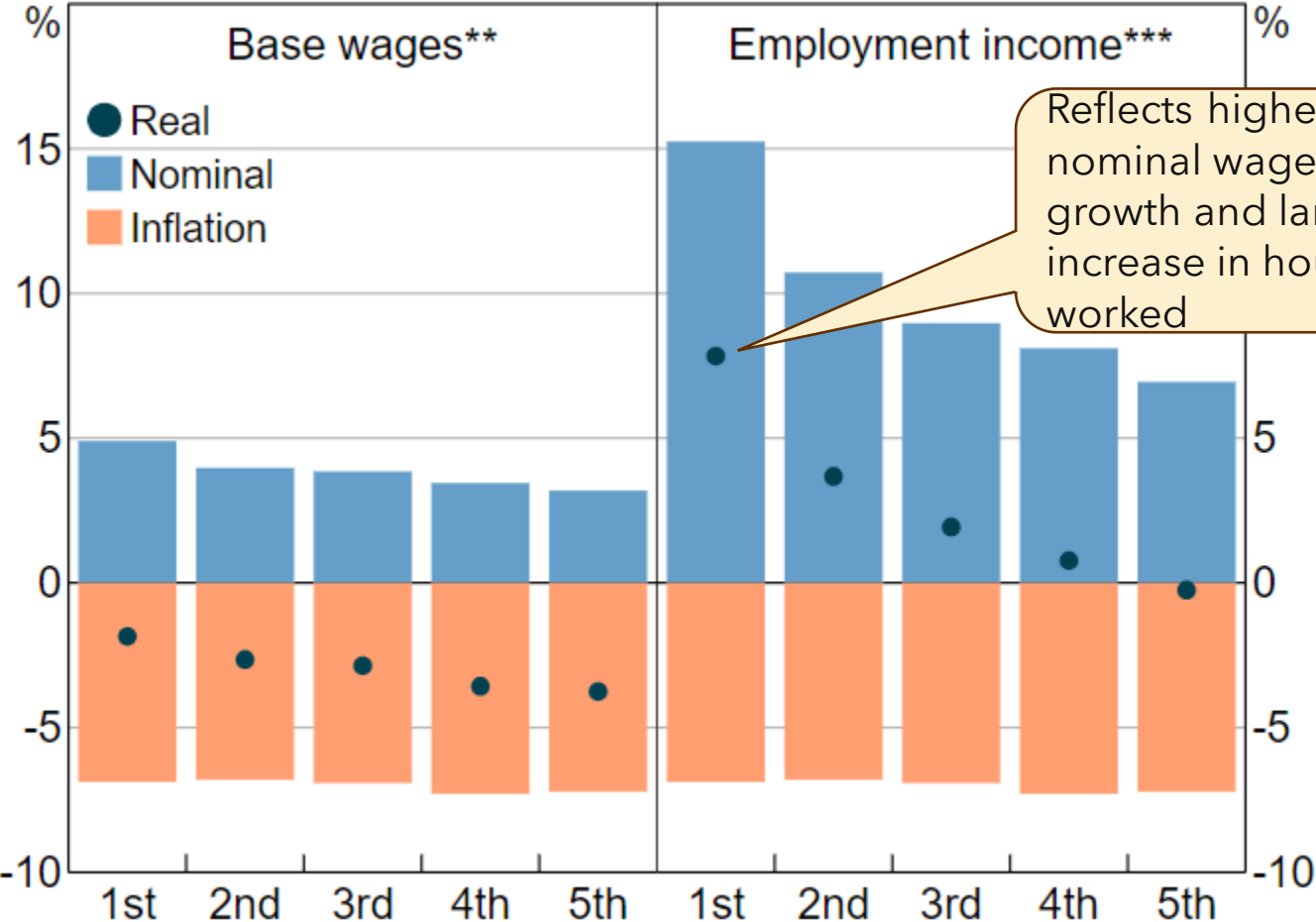
Equivalised disposable household income quintile

Note: The measures used are: gross saving as a share of gross disposable income; and currency and deposits ('liquid assets').

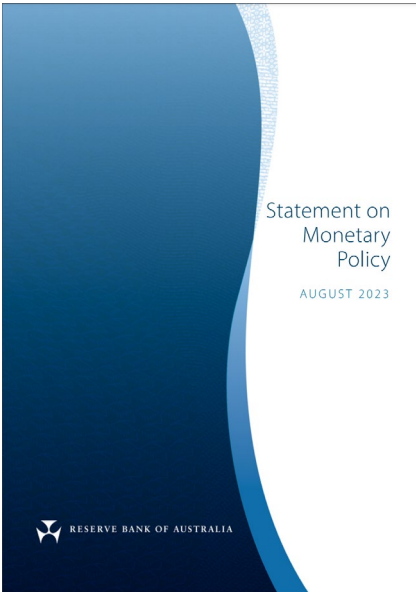
Source: ABS (2022), Australian National Accounts: Distribution of Household Income, Consumption and Wealth, 2003-04 to 2021-22, Table 3.11.

Cutting the other way, real income growth has been faster for lower-income earners

Growth in earnings by income quintile, year-ended March 2023



The experience of individual households varies widely and some workers who have remained in the same job and maintained the same hours will have seen their real incomes decline significantly over the past year.



Source: RBA (2023), *Statement on Monetary Policy*, August, Graph 4.29.

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There are many reasons to worry about entrenched high inflation, the disproportionate impact on the most vulnerable is another (valid) one

- Although award wage rises and strong labour market have somewhat buffered low-income earners during most recent episode

Fiscal policy responses to high inflation should be targeted to the most vulnerable

- Generally governments should avoid adding fuel to fire by greater spending
- BUT may be a case to help those that are most likely to be squeezed
- 2023-24 budget cost of living package fairly sound - focussed on reducing prices (pharmaceuticals, energy) and higher payments for recipients of JobSeeker and related payments and rent assistance
- Not simply a temporary inflation response but more about addressing the long-term structural issues with those payments

CPI does an ok job when it comes to an indexation of payments

- Not a clear case for a more tailored set of indexes
- Generally tracks cost of living shifts pretty well

To properly understand distributional effects we need better data

- More granular data like retail transaction data allows us to understand substitution response to inflation
- Households Expenditure Survey is now very old (2015-16) - need updated version for this and other important distributional research (ABS 🙏)

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