

G20

# DATA GAPS INITIATIVE 3

## Distributional national accounts for income, consumption and saving: Australia

JUNE 11-13, 2024

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# AGENDA

1. Distributional national accounts in Australia
2. Challenges for ABS
3. Results: Through the COVID-19 pandemic
4. Policy use
5. Future of distributional national accounts in Australia

# Distributional national accounts in Australia: History

<b>2013</b>	<ul style="list-style-type: none"> <li>• First publication of distributional estimates on income, consumption and wealth for 2009-10</li> <li>• Estimates for all 5 distributional indicators</li> </ul>
<b>2014</b>	<ul style="list-style-type: none"> <li>• Published biennial time series from 2003-04 to 2011-12. Models used to estimate data gaps in distributional source data</li> <li>• Changed from person to household weighted quintiles</li> <li>• Improved distribution of non-indigenous population living in very remote communities.</li> </ul>
<b>2015</b>	<ul style="list-style-type: none"> <li>• Results for 2013-14 and nowcast estimates for 2014-15</li> <li>• Improved methodology/data for owner-occupied imputed rent, very remote communities and non-private dwellings, and non-profit institutions serving households (NPISH)</li> <li>• Incorporated 2013-14 data from household survey on income and wealth</li> </ul>
<b>2018</b>	<ul style="list-style-type: none"> <li>• Results for 2015-16 and nowcast estimates for 2017-18</li> <li>• Incorporated 2015-16 data from: household survey on expenditure, household survey on income and wealth, and Census</li> </ul>
<b>2021</b>	<ul style="list-style-type: none"> <li>• Preliminary results for 2019-20 and updated results for 2017-18. For 2019-20, only results for income and consumption by income quintiles published due to impacts of COVID on preliminary household survey data</li> <li>• Improvements made to micro-macro coverage ratios for health expenditure and deposits</li> <li>• Incorporated final 2017-18 and preliminary 2019-20 data from household survey on income and wealth</li> </ul>
<b>2022</b>	<ul style="list-style-type: none"> <li>• Nowcast estimates for 2021-22, 2020-21 and updated results for 2019-20</li> <li>• Micro indicators for income derived using unit record data and other administrative data to nowcast estimates</li> <li>• Published new tables on micro-macro coverage ratios and FISIM</li> </ul>

# Distributional national accounts in Australia:

## Micro data sources

### Survey of Income and Housing (SIH)

- Income and wealth
- Every 2 years. Latest estimates: 2019-20

### Household Expenditure Survey (HES)

- Consumption
- Every 6 years. Latest estimates: 2015-16

### Social transfers in kind

- Not collected on survey forms
- Modelled estimates provided by micro survey areas
- Latest estimates: 2015-16

### Census

- Data for Very Remote Communities and Non-private Dwellings
- Every 5 years. Latest estimates: 2021

Availability of micro data									
	2004	2006	2008	2010	2012	2014	2016	2018	2020
SIH (Income)	✓	✓	✓	✓	✓	✓	✓	✓	✓
SIH (Wealth)	✓	✓	✗	✓	✓	✓	✓	✓	✓
Social transfers in kind	✓	✗	✗	✓	✓	✓	✓	✗	✗
HES (Consumption)	✓	✗	✗	✓	✗	✗	✓	✗	✗

# Distributional national accounts in Australia:

## Distributional indicators

### Equivalised Disposable Income Quintiles and Equivalised Net Worth Quintiles

- Lowest
- Second
- Third
- Fourth
- Highest

### Household Composition

- Lone person under the age 65
- Lone person aged 65 and older
- One parent with dependent children
- Couple only under the age of 65
- Couple only aged 65 and over
- Two adults or more with dependent children
- Other

### Age of Reference Person

- 15-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

### Main Source of Income

- Wages and salaries
- Income from unincorporated business
- Property income and superannuation
- Government pensions and allowances
- Other

# Challenges for ABS

## Constrained operating/budget environment

- Resource constraints (staffing and funding)
- System and process limitations
- Barriers to reducing micro-macro gaps, exploring greater use of administrative data, and adopting/testing new approaches and methods

## Micro data quality and timeliness – survey collection impacts

- Last Household Expenditure Survey in 2015-16
- Challenges of applying cross-sectional data in household surveys to derive time series of distributional estimates
- Need to further understand differences (scope, conceptual, imputations) to understand causes of micro-macro gaps

# Challenges for ABS: Through the COVID-19 pandemic

## Models for household consumption

- Models based off data from 2010 and 2016. Lack of alternative data
- Assumptions of model no longer valid
- Flow on impacts to robustness of gross saving estimates

## How to deal with distributional changes due to an economic shock?

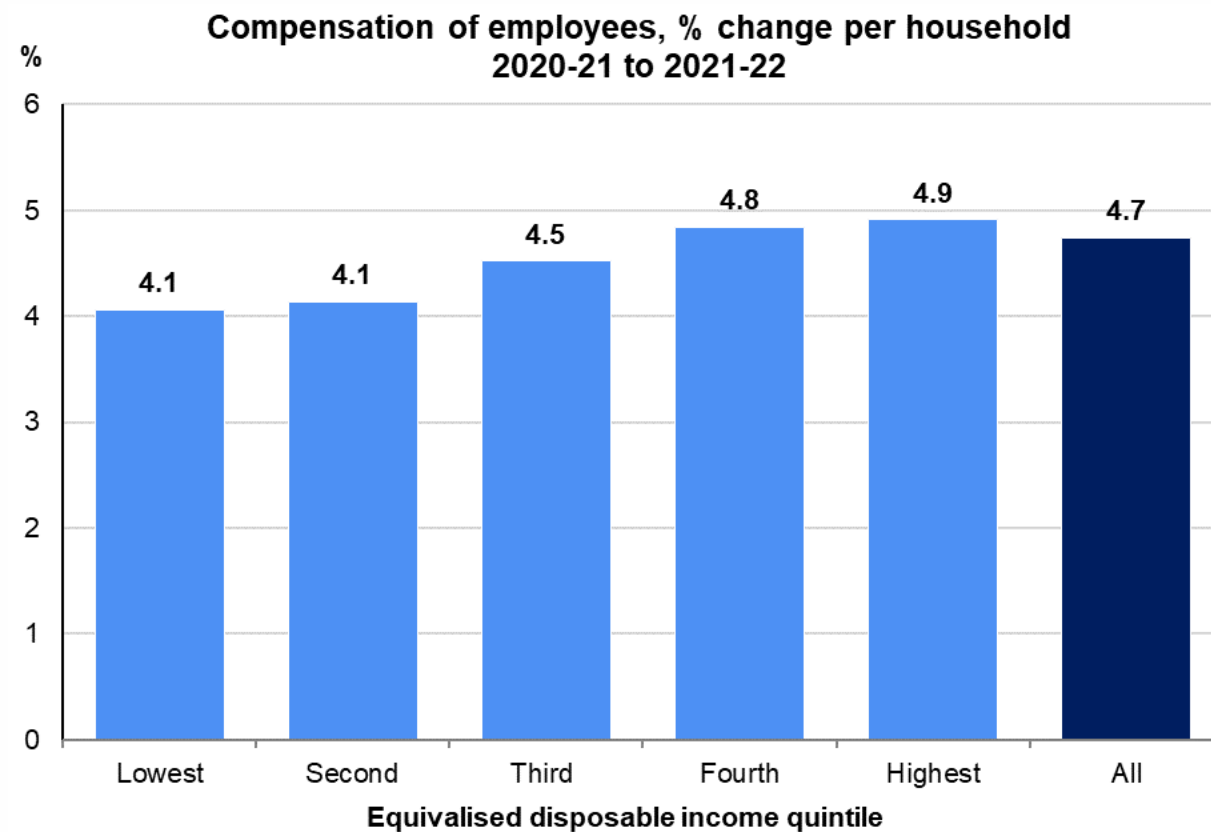
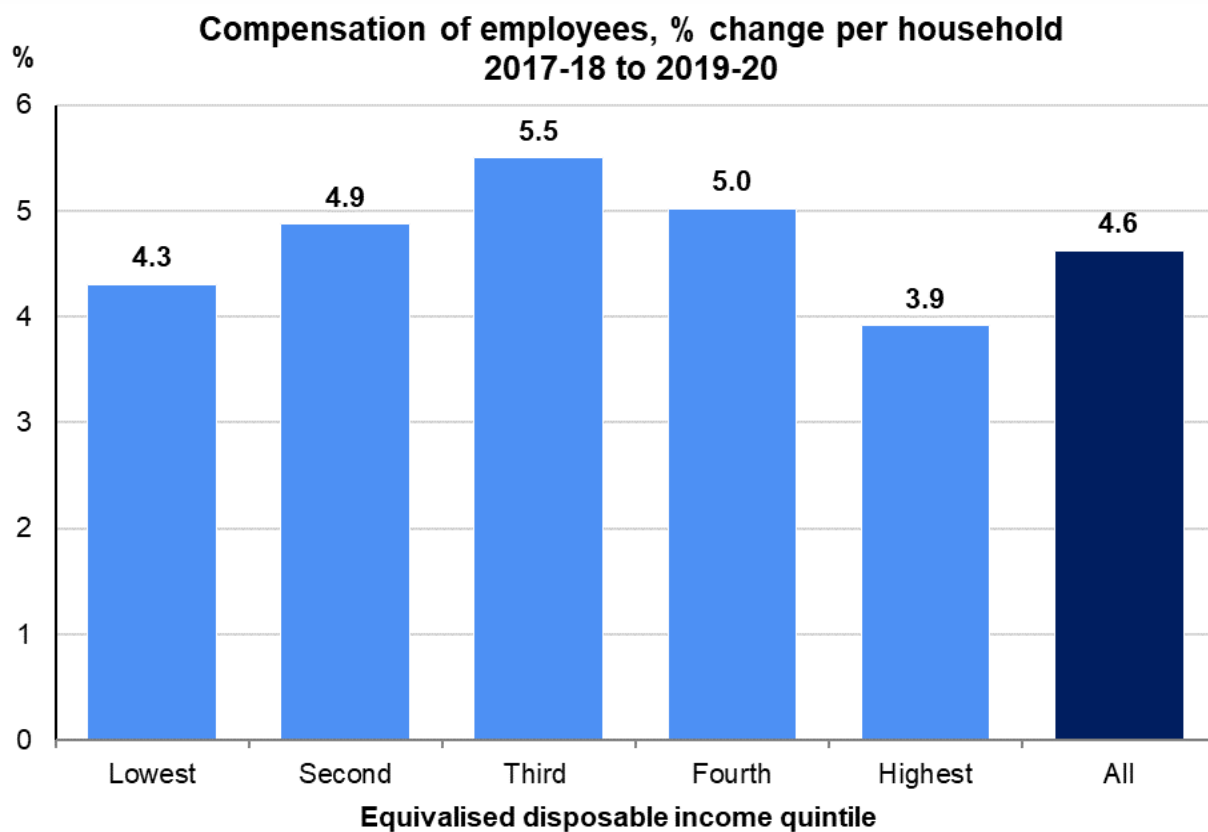
- Households changing income quintiles purely due to temporary government support payments
- What was due to actual changes in income as opposed to stimulus payments?

## Impacts on Survey of Income and Housing (preliminary 2019-20)

- Survey forms designed before COVID peak, so no specific guidance or questions related to reporting COVID support payments
- Timing of survey and responses
  - Households responding before COVID support payments were introduced
- Not having interviewers impacted response quality of some items (e.g. residential property values)
- Several data quality issues addressed in final 2019-20 publication

# Results: Through the COVID-19 pandemic

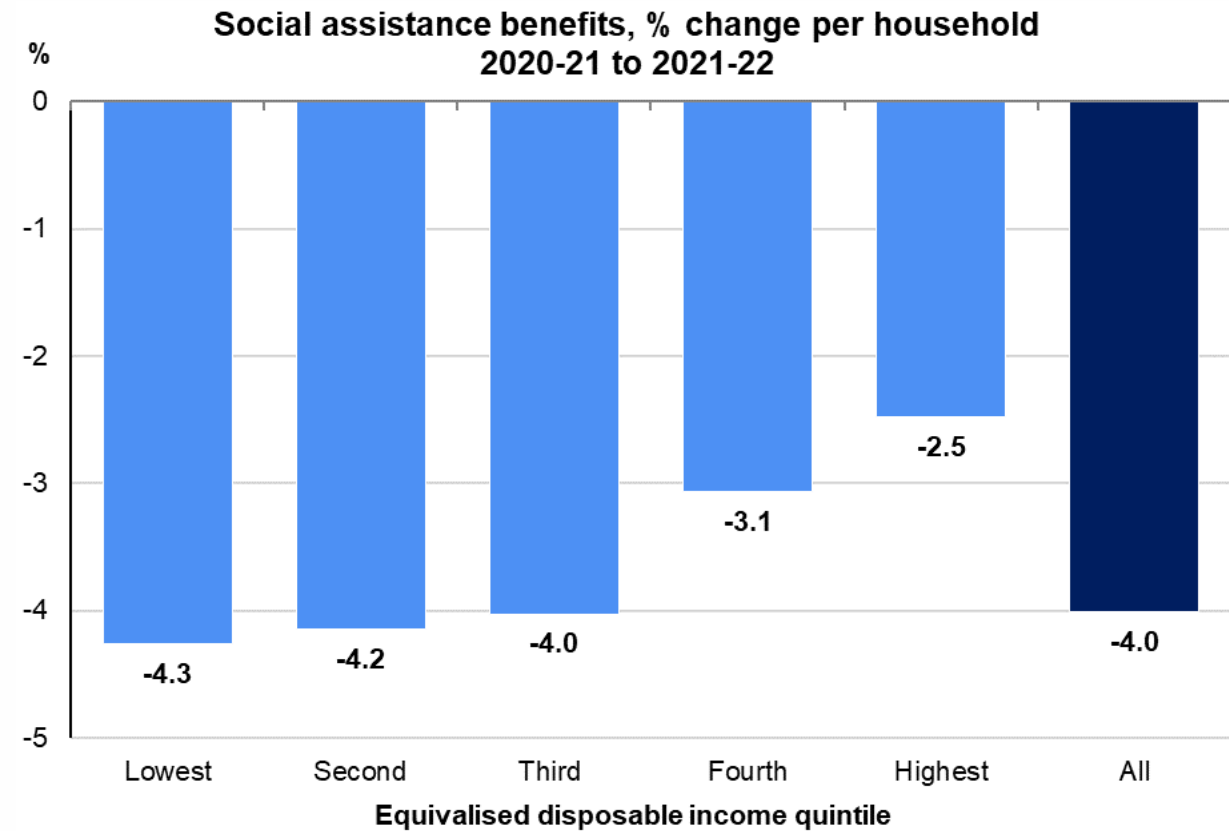
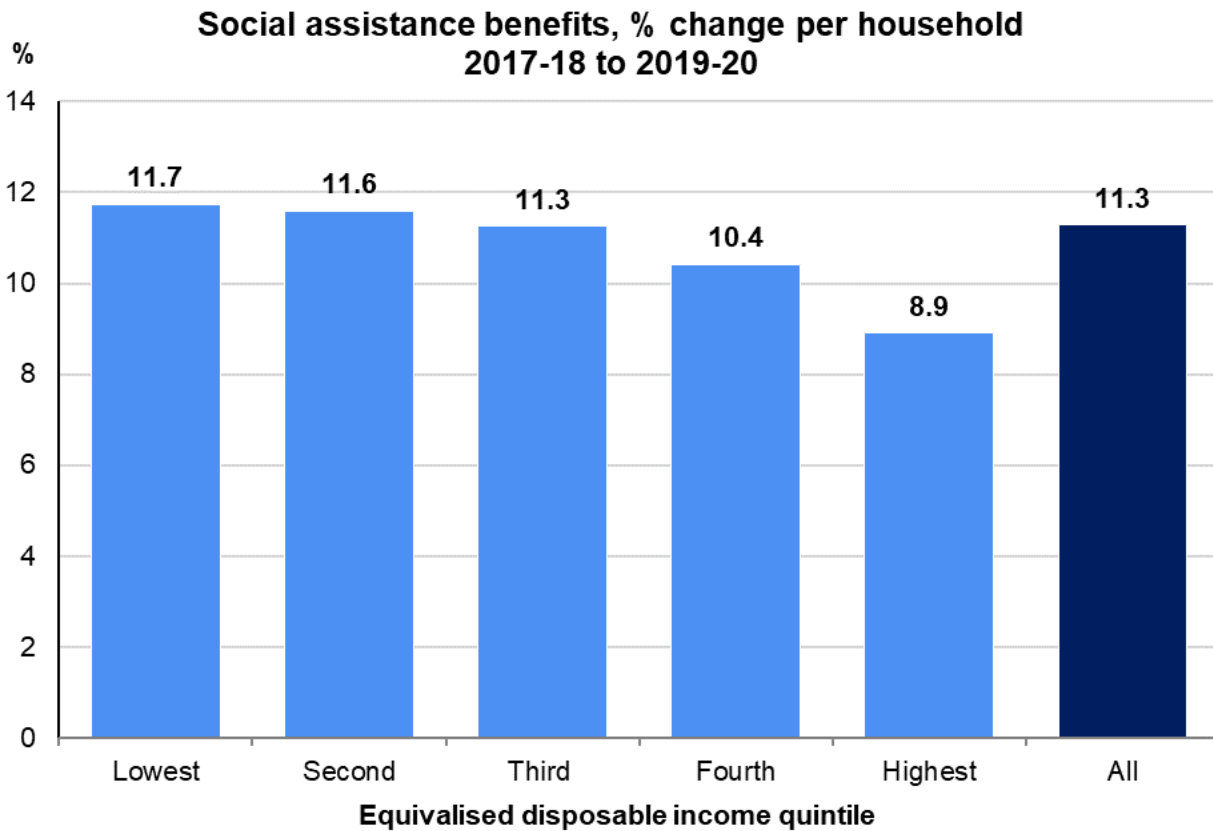
## Compensation of employees





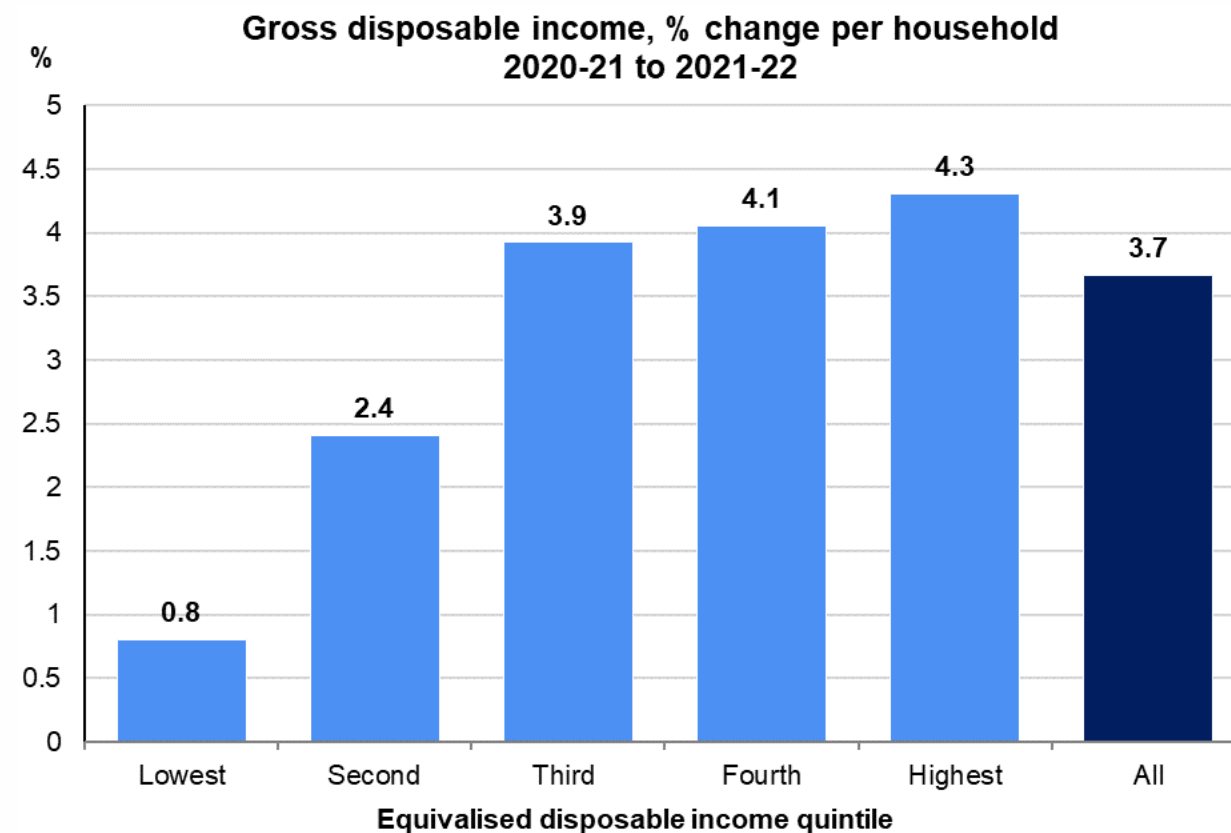
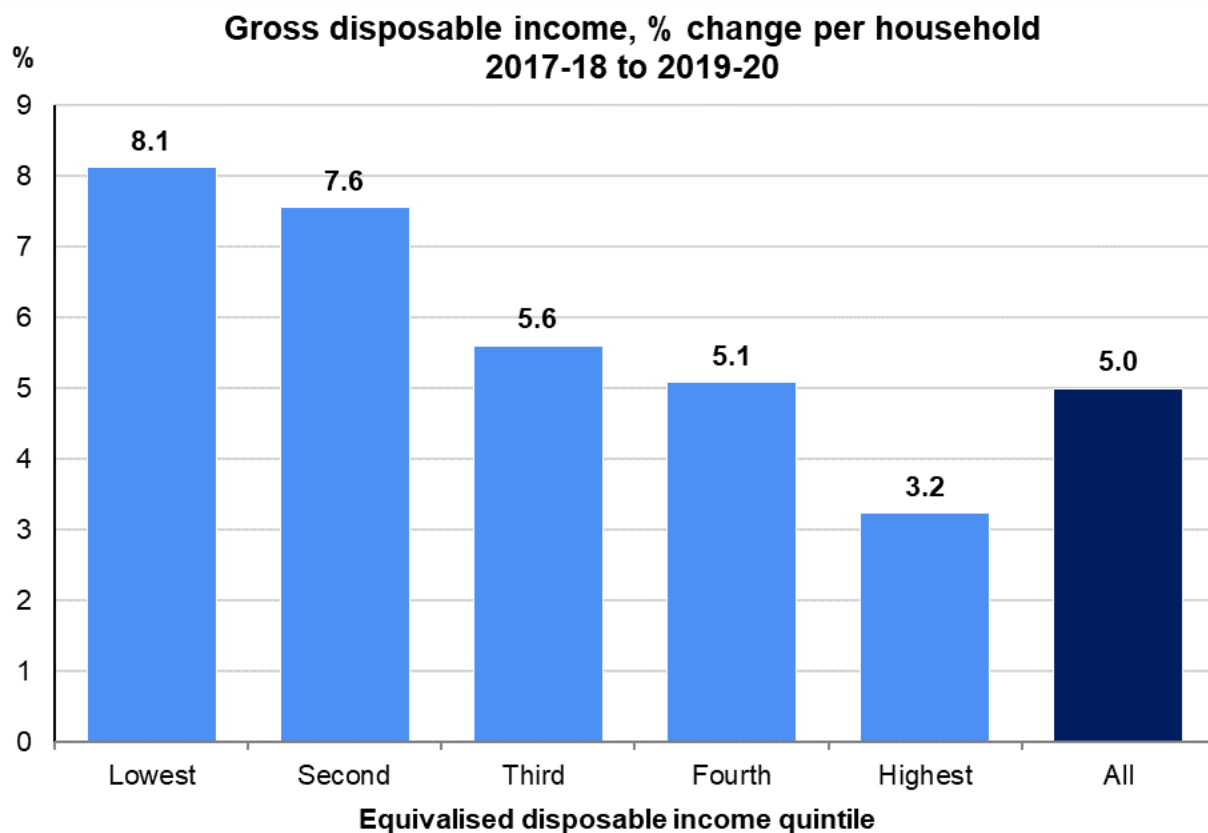
# Results: Through the COVID-19 pandemic

## Social assistance benefits



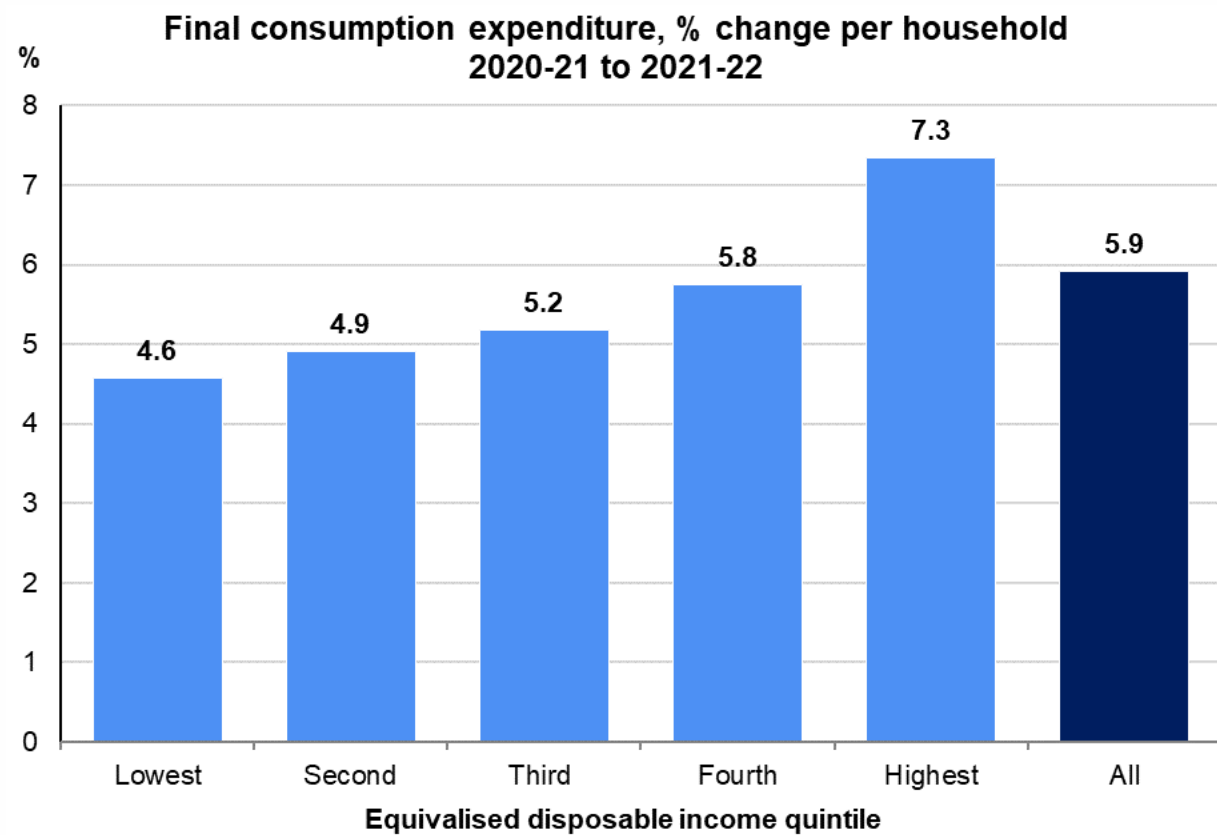
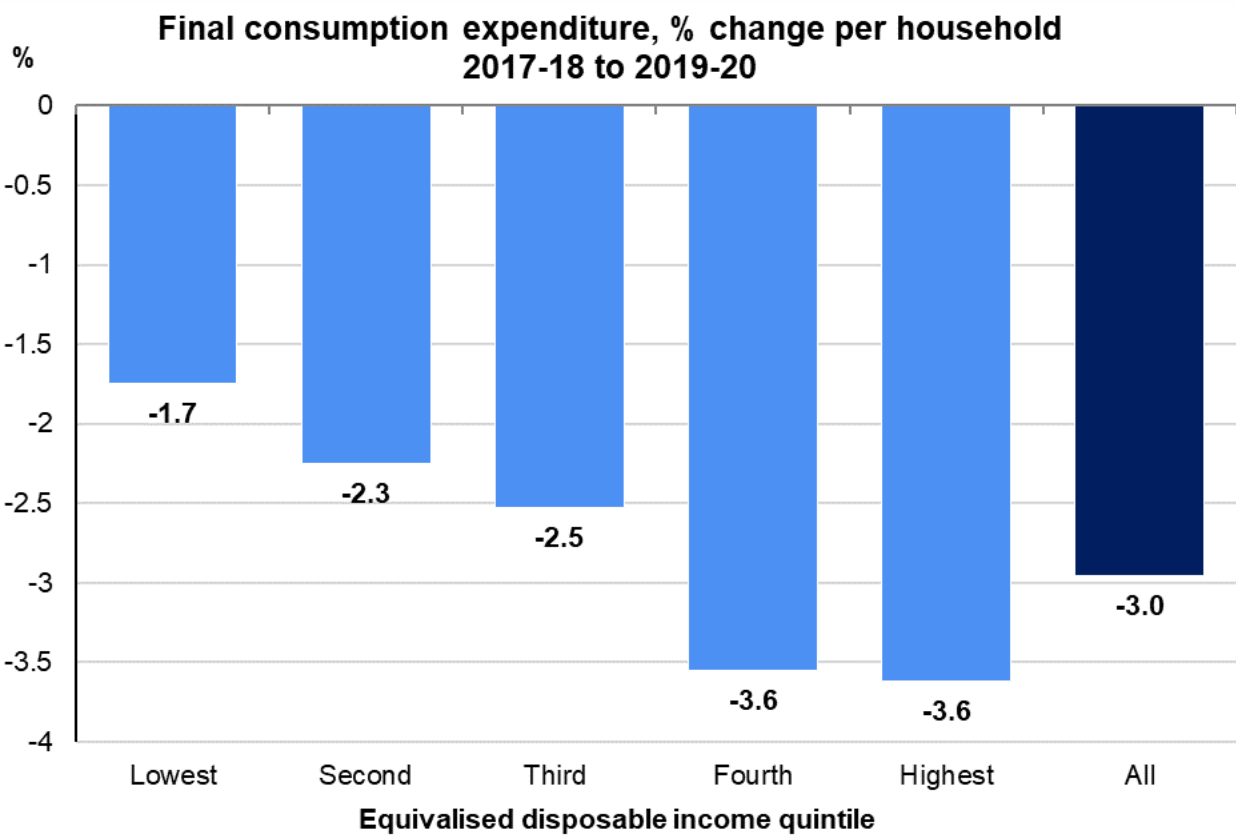
# Results: Through the COVID-19 pandemic

## Gross disposable income



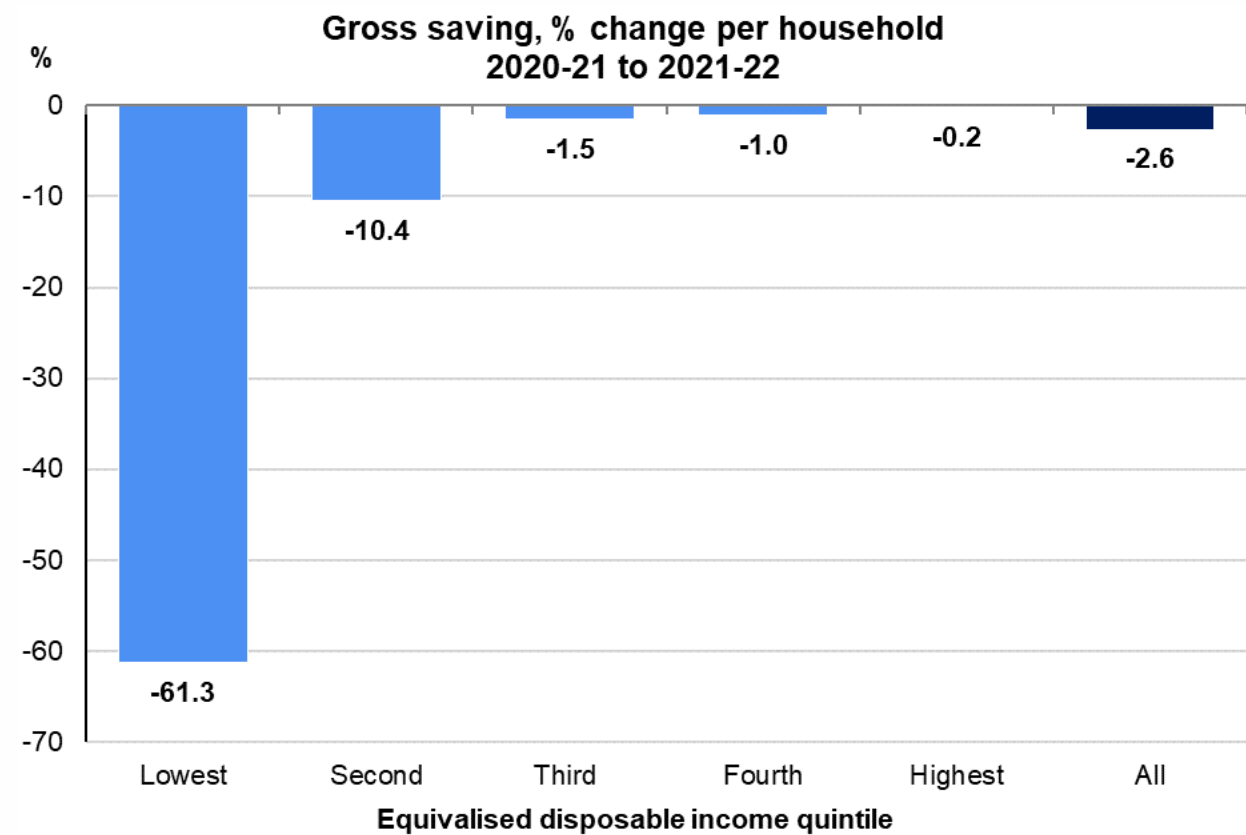
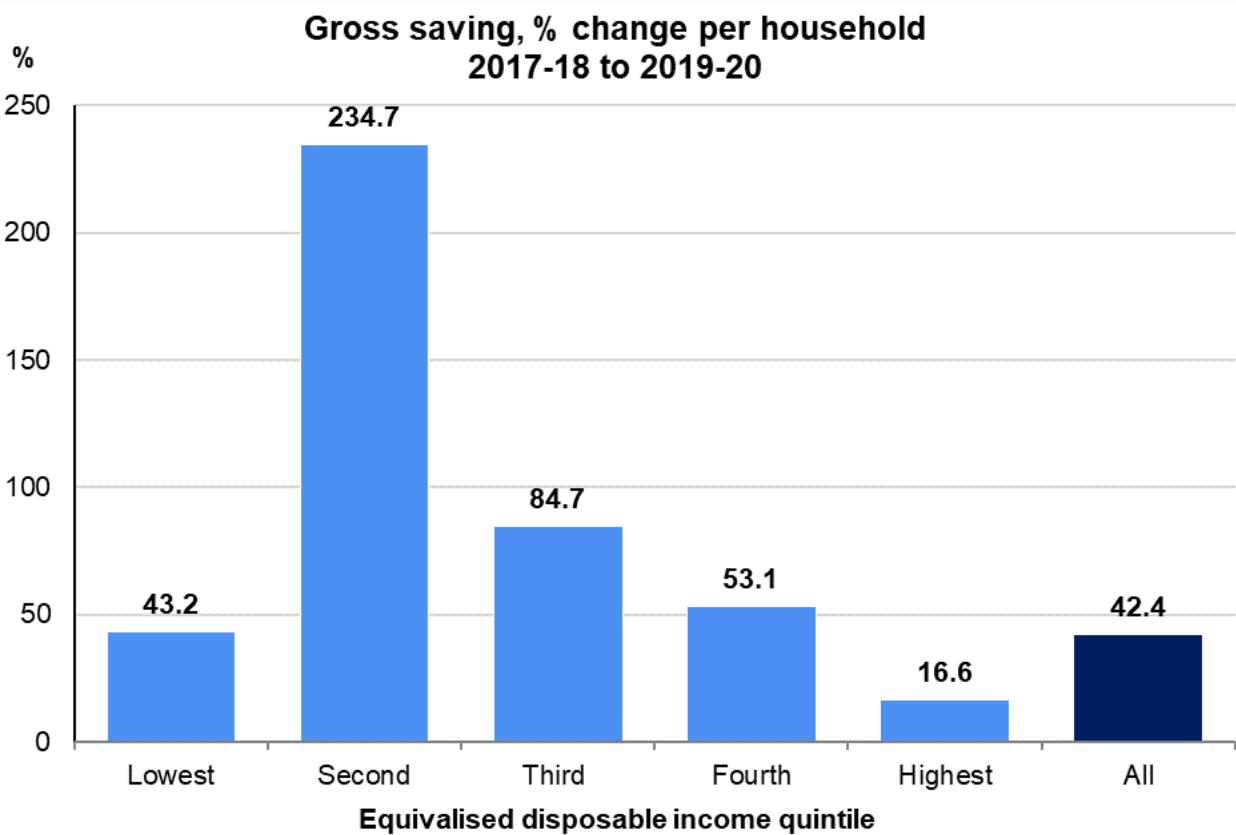
# Results: Through the COVID-19 pandemic

## Final consumption expenditure



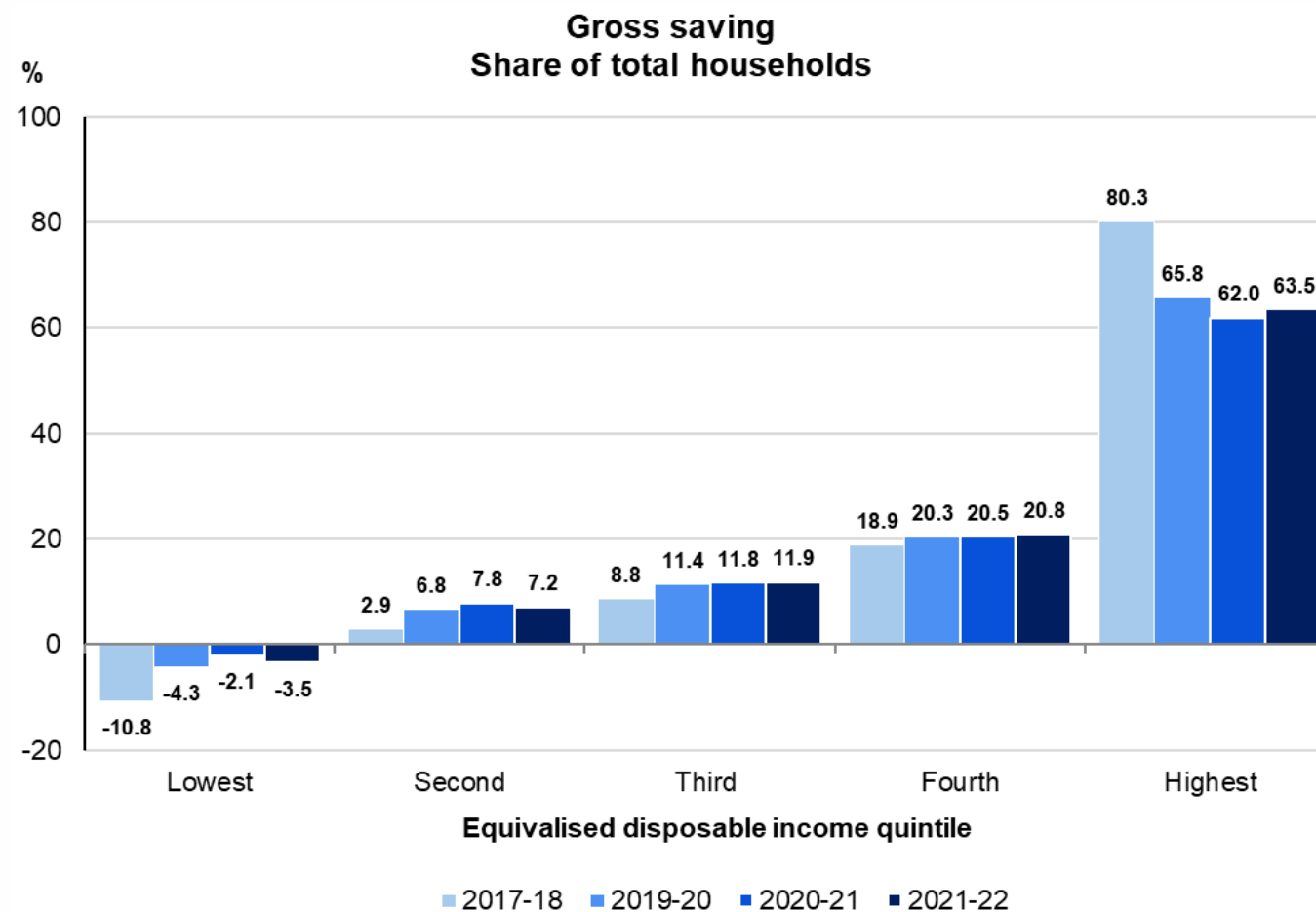
# Results: Through the COVID-19 pandemic

## Gross saving



# Results: Through the COVID-19 pandemic

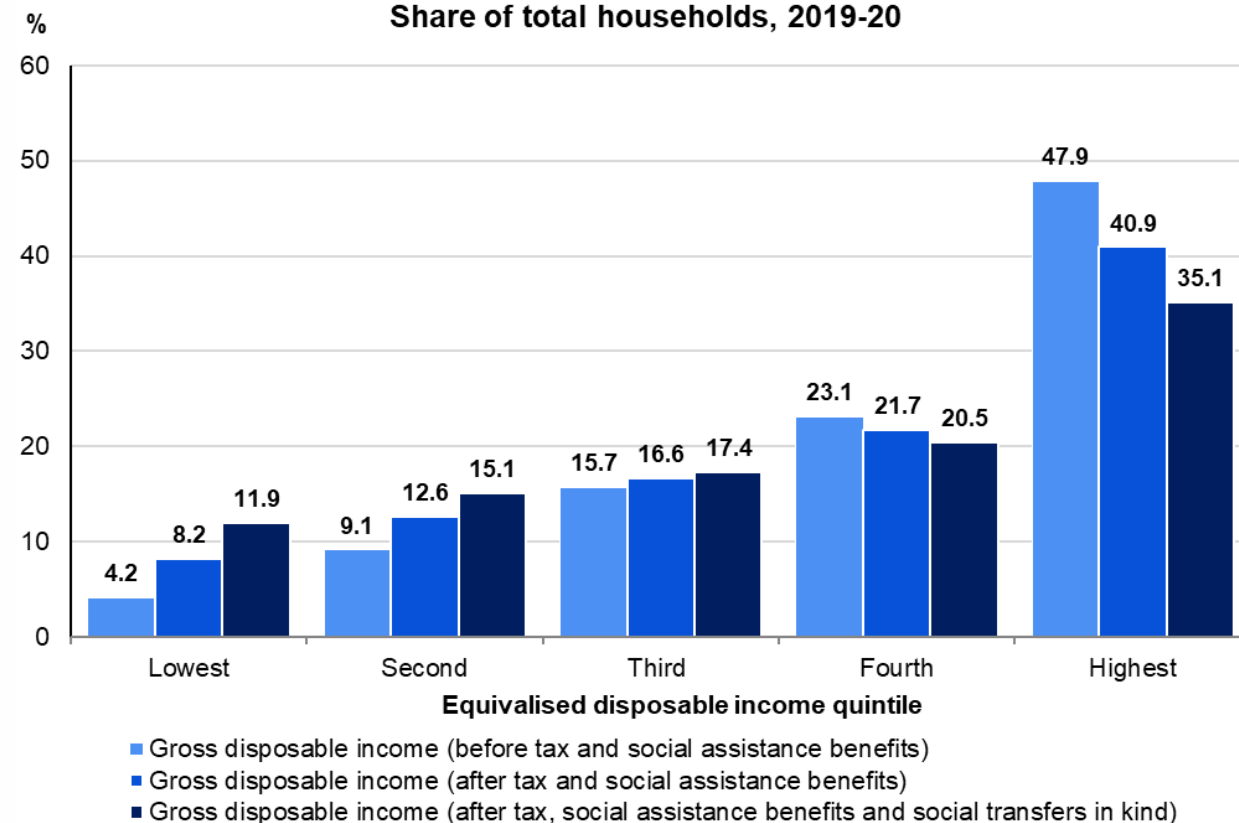
## Gross saving



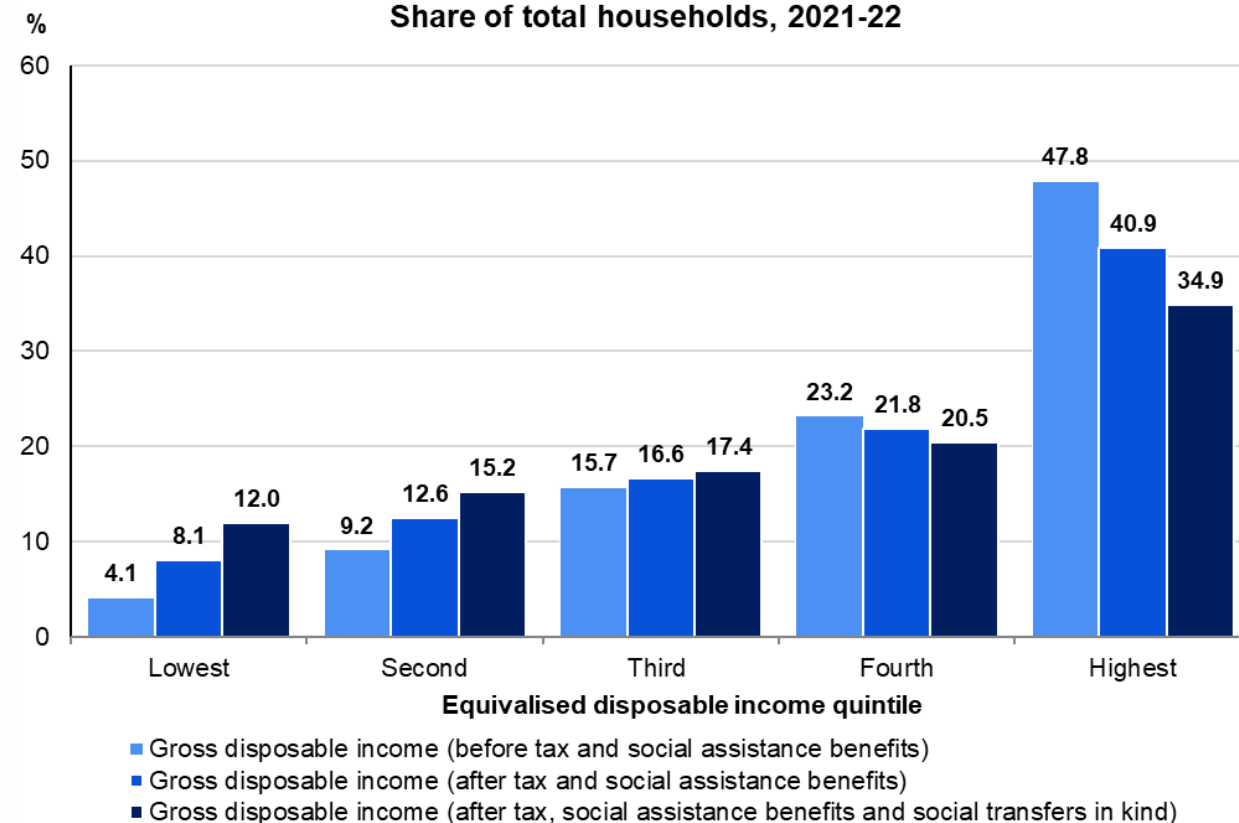
# Results: Through the COVID-19 pandemic

## Impact of redistribution

Impact of redistribution: Gross disposable income  
Share of total households, 2019-20



Impact of redistribution: Gross disposable income  
Share of total households, 2021-22



# Policy use

## Shorter term questions

- As central banks increase interest rates to address high inflation, how does this impact different households?
  - Who is spending, what are households spending on and how is spending behaviour changing?
  - Impacts on savings and what are households doing with savings accumulated through COVID-19?
  - How are higher interest payments impacting lower income households?

## Longer term questions

- How are different households acquiring assets (debt or savings)?
- Which households are purchasing property?
- What will be the impact of Australia's aging population on household income, spending and wealth?

# Future of distributional national accounts in Australia

## ABS redesign of household surveys

- Plans for new Household Expenditure Survey by 2027-28
  - Development of digital first approach using a digital diary with receipt image capture
- Survey of Income and Housing
  - Data for 2023-24 ready for internal use by end of 2025

## Administrative data and data integration

- ABS continually seeking to acquire, explore and link more administrative datasets with person and business level data
  - Current access to datasets on income, superannuation, government payments
- Potential to supplement household surveys and use as micro indicators between survey years
- Significant role in reducing costs and burden of household surveys, and increasing frequency and timeliness of distributional estimates



# Future of distributional national accounts in Australia

## Greater investment required for distributional national accounts

- Need for increased funding and resourcing
- Review of current processes required
- Adopt more flexible systems for compilation and analysis (e.g. R, SAS, Python)

## Increase relevance of distributional statistics for policymakers

- Continue focus on improving micro-macro gaps, data quality and methodology
  - Improve modelling techniques (e.g. imputations and nowcasting)
  - Address under-representation of household groups in surveys (e.g. pareto adjustments for highest income/wealth households)
  - Increase collaboration/integration between household survey and national accounts areas
- Produce greater granularity in estimates (e.g. deciles, percentiles)
- Improve timeliness and frequency of distributional estimates

# Future of distributional national accounts in Australia

## Meeting DGI targets

- Target: Annual estimates
  - Estimates for 2023-24 achievable by end of 2026
  - Annual estimates highly dependent on increased funding/resourcing
  - Quality of and access to administrative data a critical factor
- Second-best target: Estimates every 3-5 years
  - Achievable but still dependent on adequate funding/resourcing
  - ABS plans for household surveys on income, wealth and expenditure every 2-5 years will enable this

## Relevant links

[Information Paper: Australian National Accounts, Distribution of Household Income, Consumption and Wealth, 2009-10](#)

[Australian National Accounts: Distribution of Household Income, Consumption and Wealth](#)

[Household Income and Wealth, Australia](#)

[Household Expenditure Survey, Australia: Summary of Results](#)

[Census](#)



# Discussion

