Rent Indexes and Additional Insights from Administrative Data

Australian Bureau of Statistics
Informing Australia's important decisions

Overview

▶ Survey data versus administrative data.

▶ Former survey-based CPI rent index.

▶ Improvements made.

▶ Additional insights from admin data.

▶ Possible further improvements to rent index.

Context

▶ The CPI Rents series is one of the most highly weighted indexes in the Australian CPI.

▶ MRI owns and licenses rental property management software used by Australian rental property managers, covering a significant proportion of the market.

▶ The ABS currently collects admin data from MRI which contains property and rental price information.

Data sources

	Former survey sample	Administrative data set
Data source	Sample of real estate agents reporting on a sample of rental properties	Software used by rental property managers, provided by MRI
Sample size (approx.)	4,000	630,000 585,000 (after cleaning) 460,000 (excl. non cap city)
Collection frequency	Quarterly – month 2	Monthly
Sample update	Replacements made when property no longer being rented	Sample reviewed every month for vacant properties, which are then replaced New properties added to the sample every 3 months

Survey-based approach

▶ Constant sample, i.e., fixed panel.

▶ Stratified by capital city, dwelling type, and number of bedrooms.

▶ Dutot index - ratio of average rents - at stratum level.

▶ Replaces properties after being vacant for 6 months.

▶ Missing prices are carried forward.

▶ No explicit quality adjustments.

Drawbacks of the survey approach

▶ Does not adequately incorporate new properties into the sample.

▶ 6 months may be too long for a vacant property to be replaced - may bias aggregate movements toward zero movement.

▶ A subset of the dataset is missing the "number of bedrooms" variable – restricts how we can use this portion of the datasets.

▶ Distribution of properties below the capital city level in the admin data set does not align with Census - potential cause of bias.

- Adds new properties to the sample every 3 months.

- Replaces properties after being vacant for 3 months.

- Weights properties within each stratum to align with Census counts at detailed level.
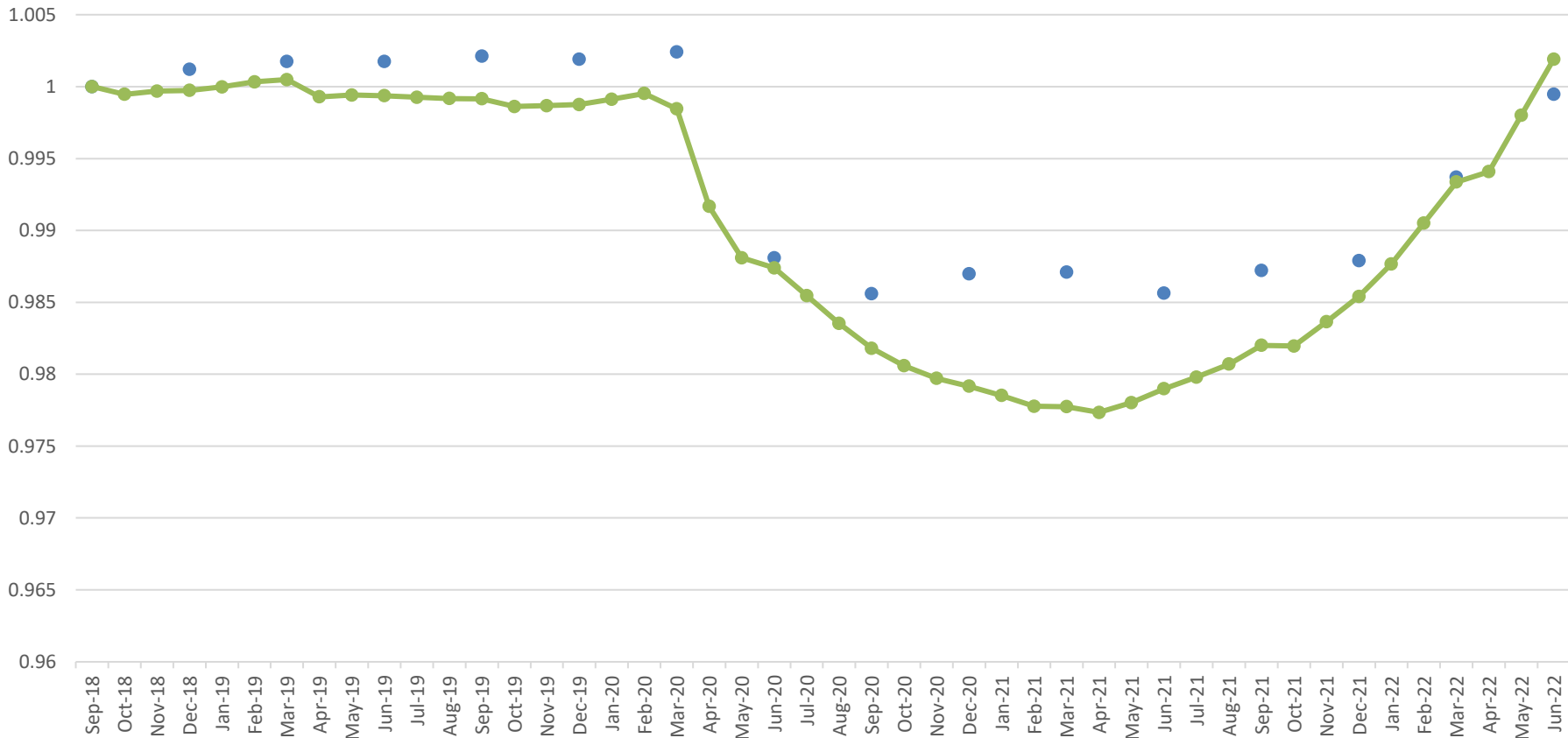
- Calculated monthly.

Expected standard errors much lower (sample is 100x bigger).

Quarterly Results - Australia
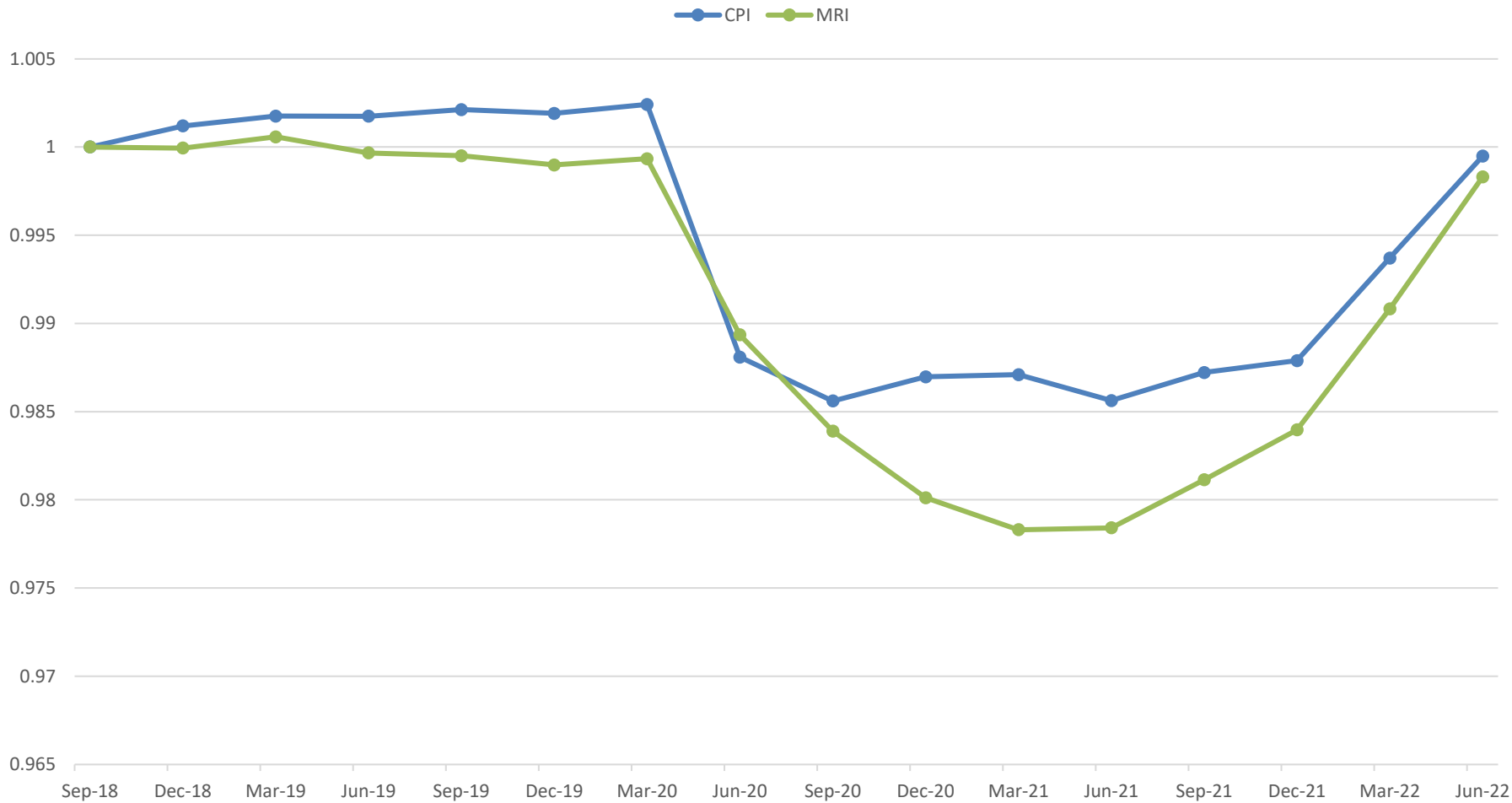
Monthly Results - Australia

Additional insight - spoilers

▶ Rent inflation is currently much stronger than the years prior to the pandemic.

▶ Rents have increased more in regional areas over the pandemic.

▶ Rent increases have become larger and more common over the past year…

▶ …particularly for the 2–3 per cent of properties each month that change tenants.
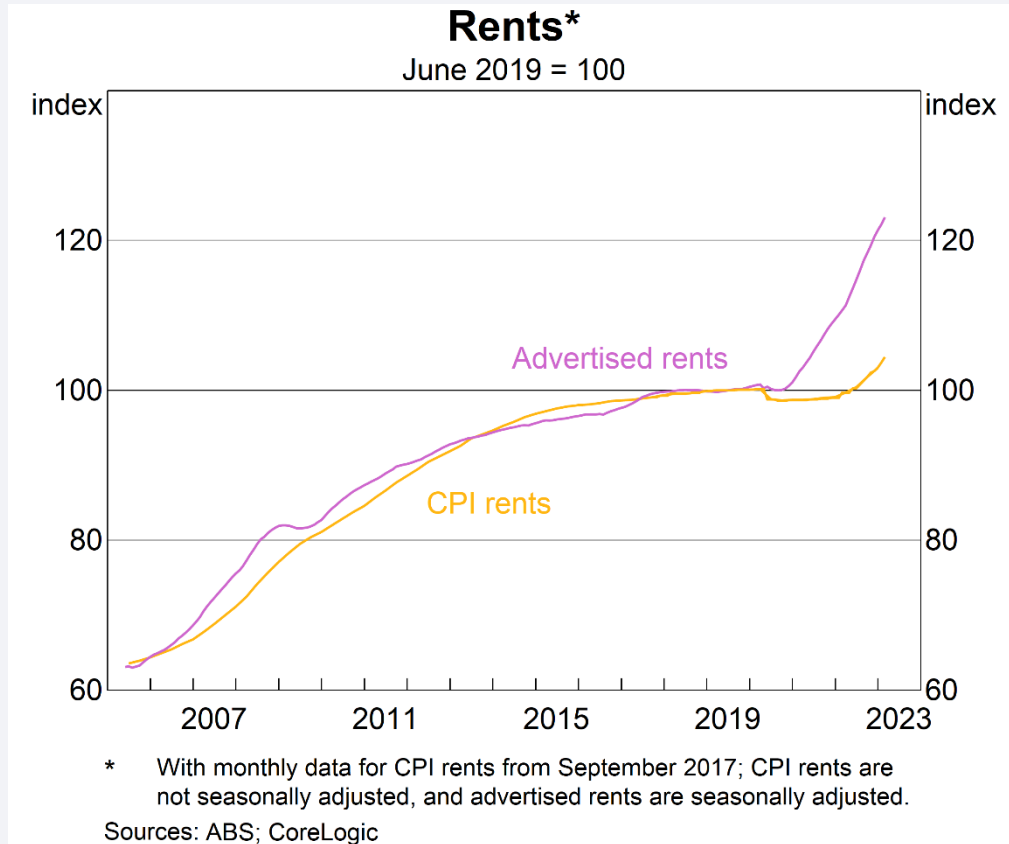
Rental Vacancy Rates*
Seasonally adjusted
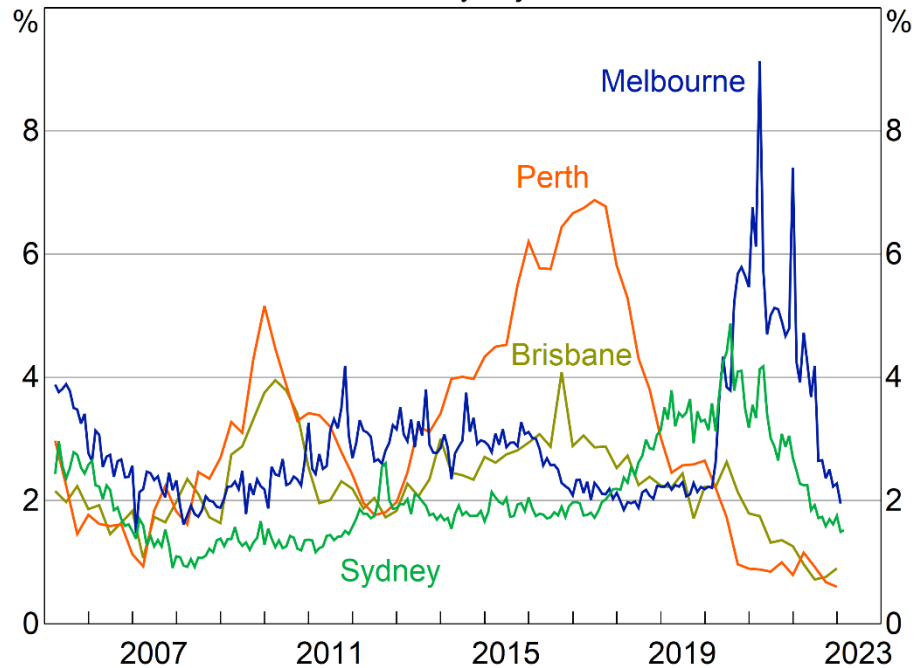
* Data is monthly for Sydney and Melbourne and quarterly for all other series.
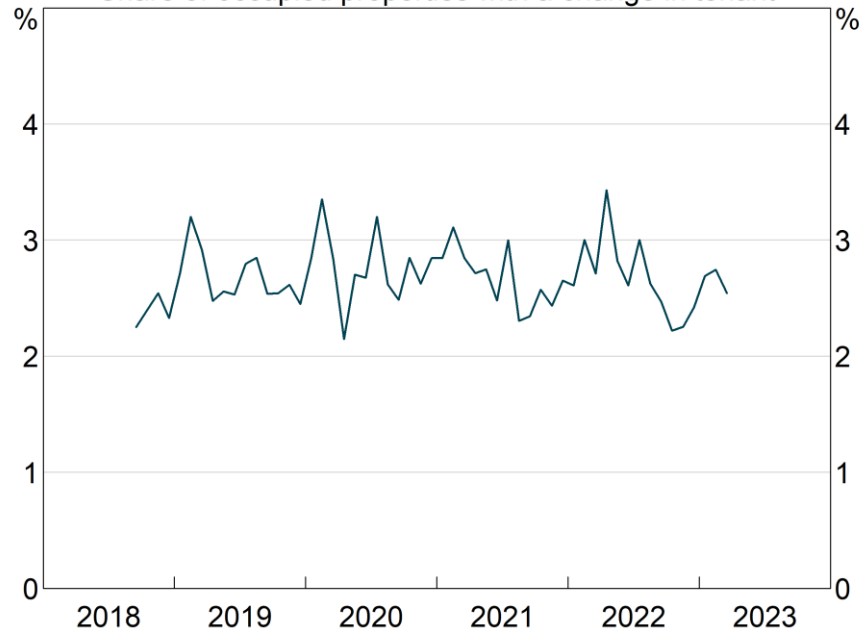
Sources: REIA; REINSW; REIV

Rents*

June 2019 = 100

Advertised rents

CPI rents

* With monthly data for CPI rents from September 2017; CPI rents are not seasonally adjusted, and advertised rents are seasonally adjusted.

Sources: ABS; CoreLogic

30/05/2023

Rental market turnover

30/05/2023

Regional rent price indexes
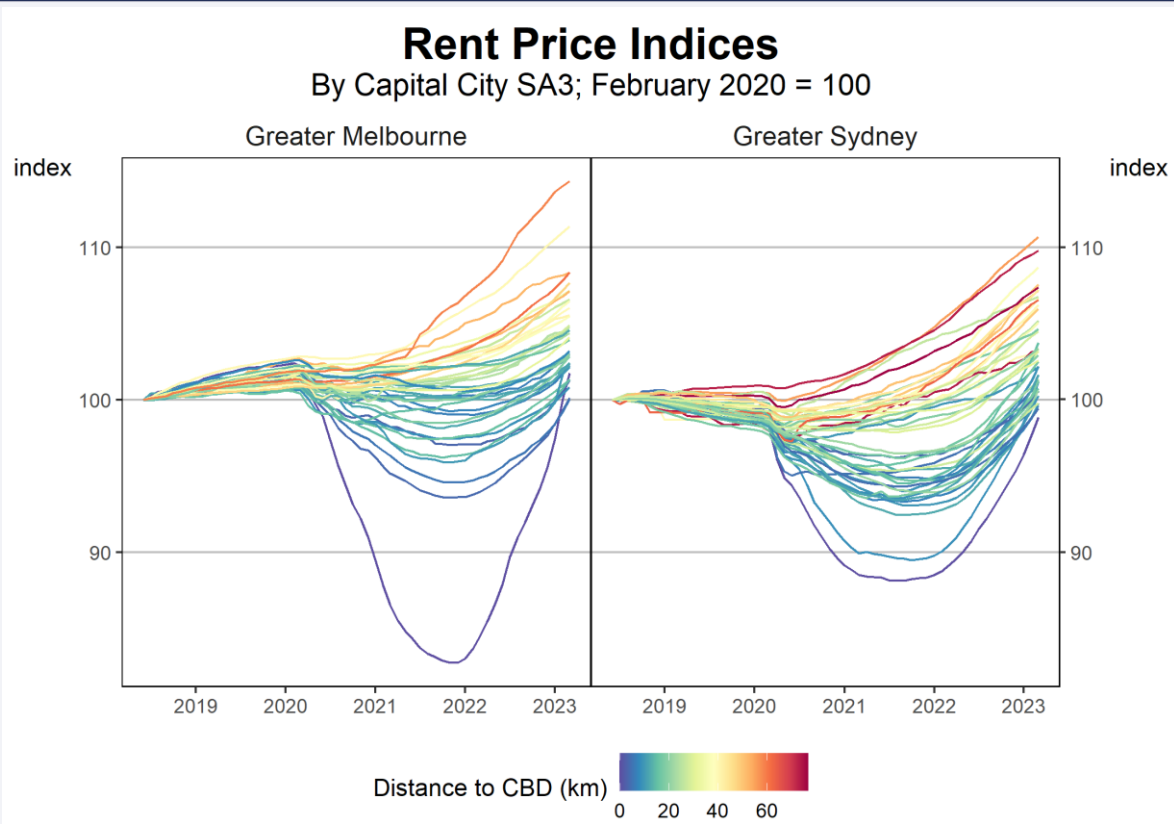

CPI Rents
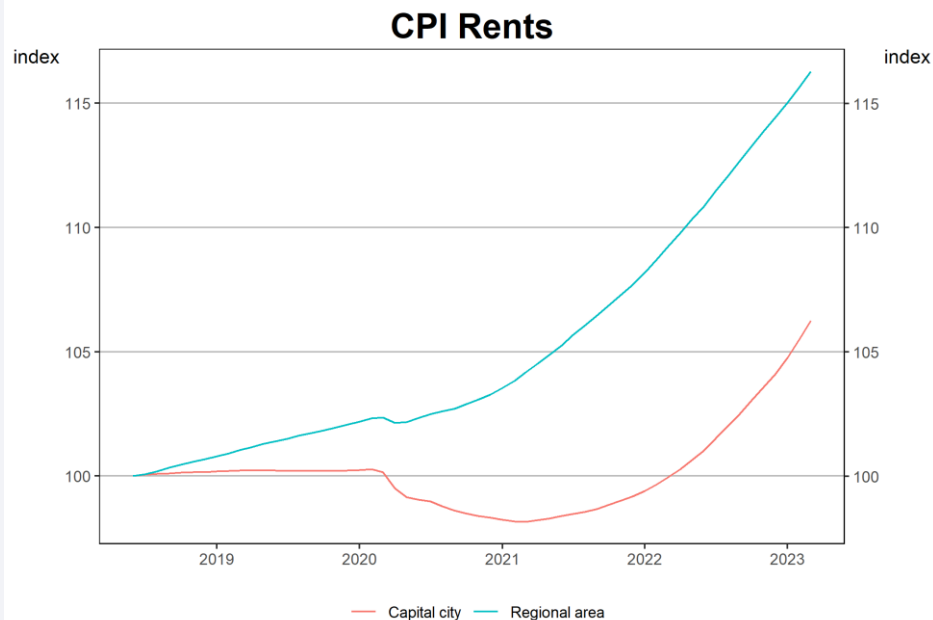
Source: ABS
* Stratified by SA3 and property type. Excluding rent assistance.

Rent Inflation*
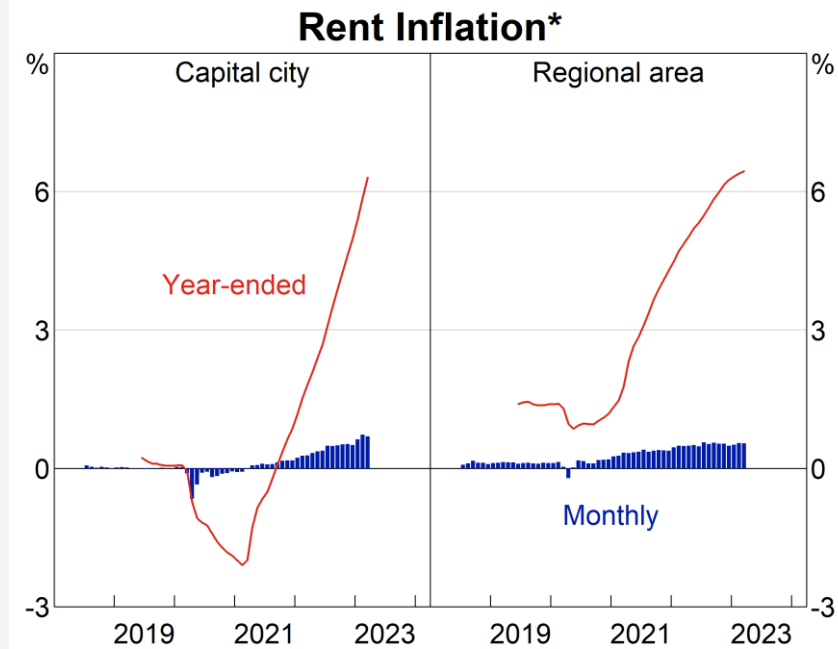
* Total private dwellings, excluding rent assistance. Stratified by SA3 and property type.
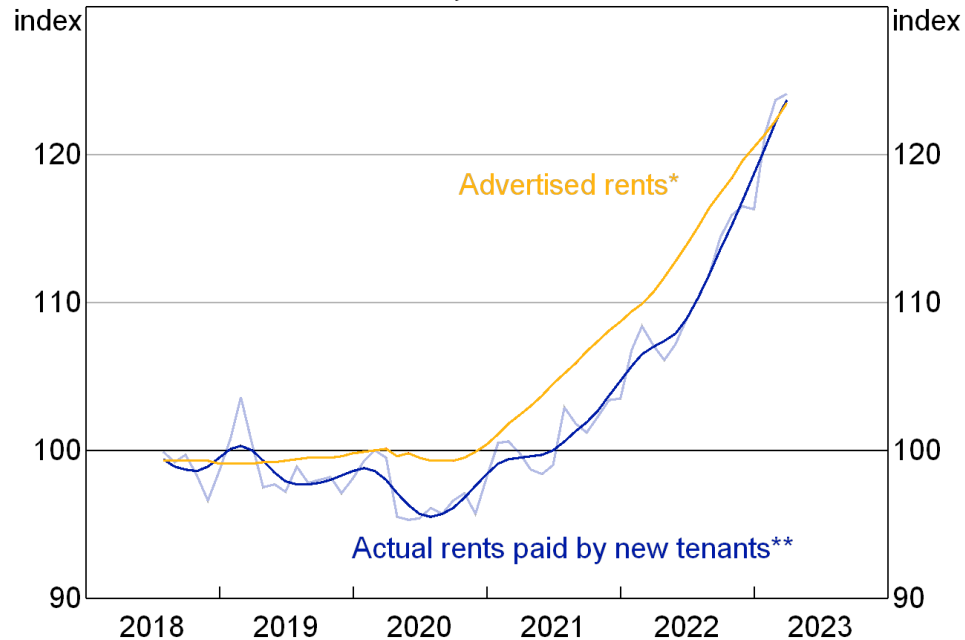
Source: ABS

Rent Price Indices
By Capital City SA3; February 2020 = 100

Source: ABS

Measures of Rent Prices for New Tenants
February 2020 = 100

* Listed asking rents for vacant rental properties.
** Properties with a change in tenant. Darker line is 13-month Henderson trend.

Sources: ABS; CoreLogic

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Future Work

▶ Improved stratification.

  More detailed in terms of location; no stratification according to number of bedrooms (to incorporate properties with missing bedroom information in admin dataset).

▶ Other index number formula - multilateral?

  Might help stabilise indexes at stratum level.

More detail on this work can be found in this paper, which has also been published on the ABS website:

[New insights into the rental market | Australian Bureau of Statistics (abs.gov.au)](#)

Questions?