Rental price statistics:
Impact analysis and readiness assessment

Advisory Panels on Consumer Prices

Joint session, 27 October 2023

Natalie Jones

Head of Housing Market Indices Transformation

Aims:

- Recap of methods and details of proposed improvements to private rental prices methods

- Indicative impact of including these new indices in RPI, CPI and CPIH

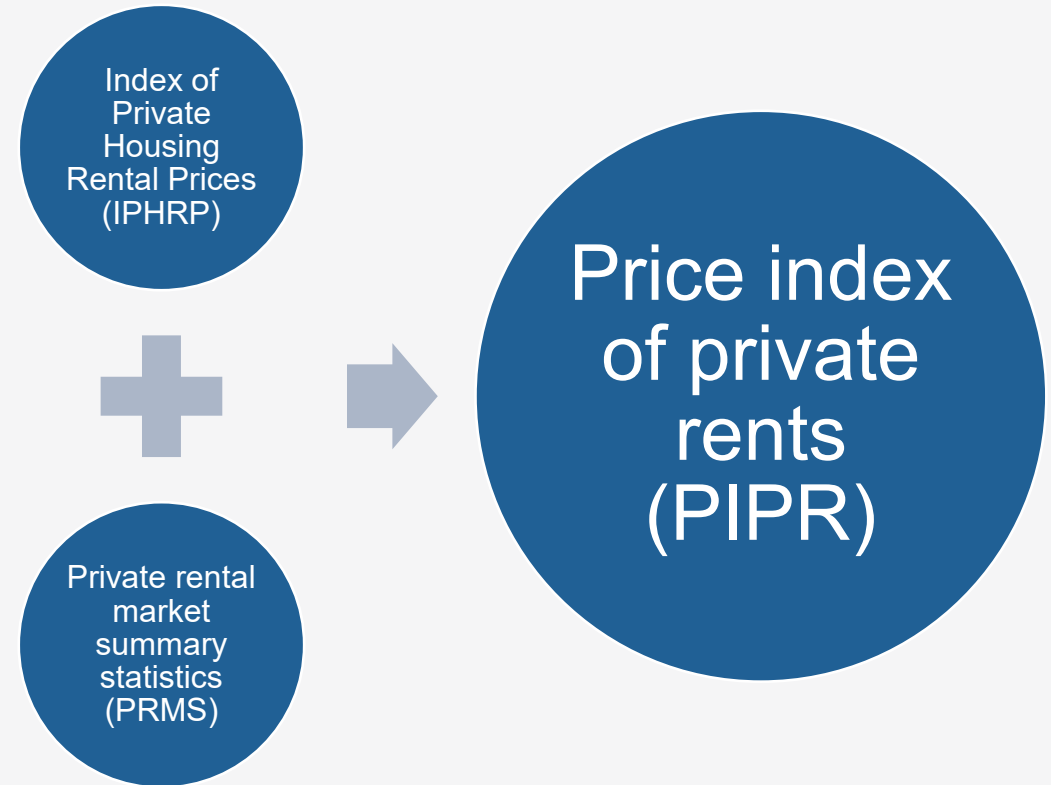- Assessment of readiness for implementation into live production

Some things to note upfront:

- These changes are being proposed for CPIH and CPI primarily, **however**, subject to a "go" decision in November we will also be proposing these changes for the RPI following the protocol as laid out in section 21 of the SRA 2007

- There are still some residual amendments we need to make to our price level statistics, however the data that you see today are not impacted by these
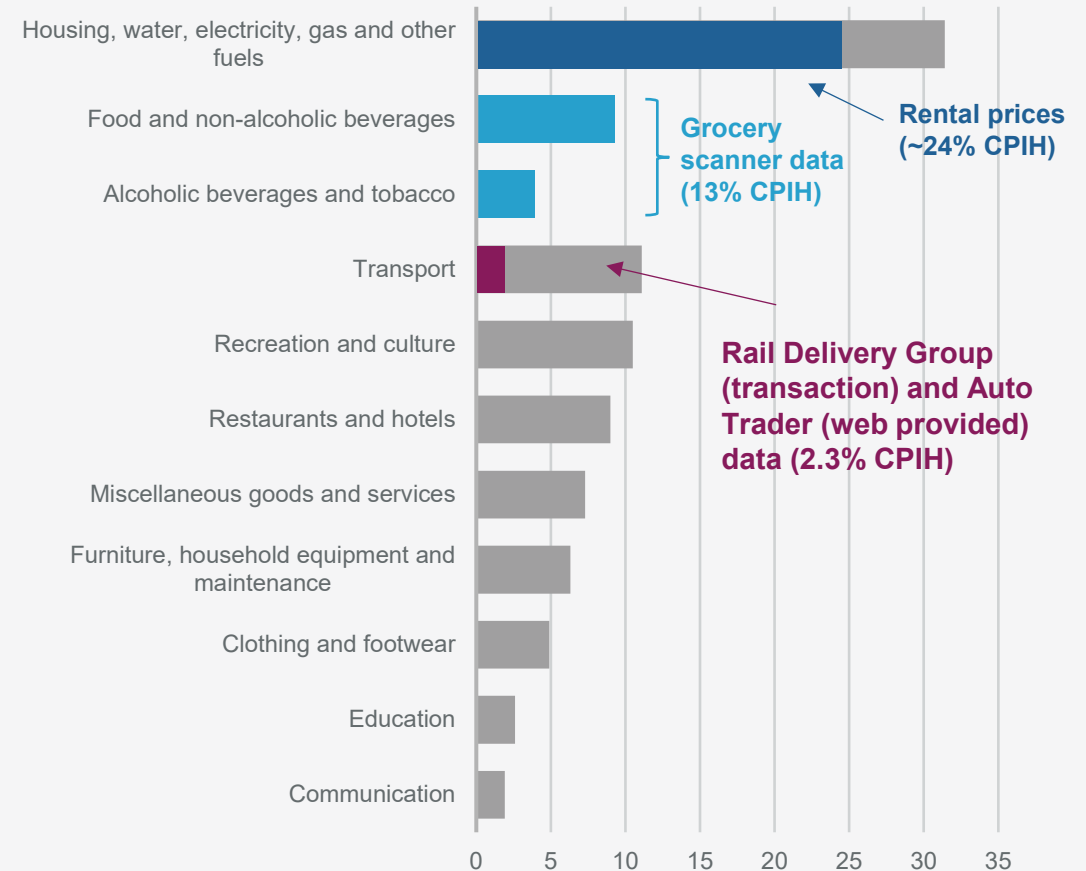
Recap of data and methods

Project Aim:

Transforming our private rental prices' statistics, including making better use of existing data sources, improving methods, and developing systems

Index of Private Housing Rental Prices (IPHRP)

Private rental market summary statistics (PRMS)
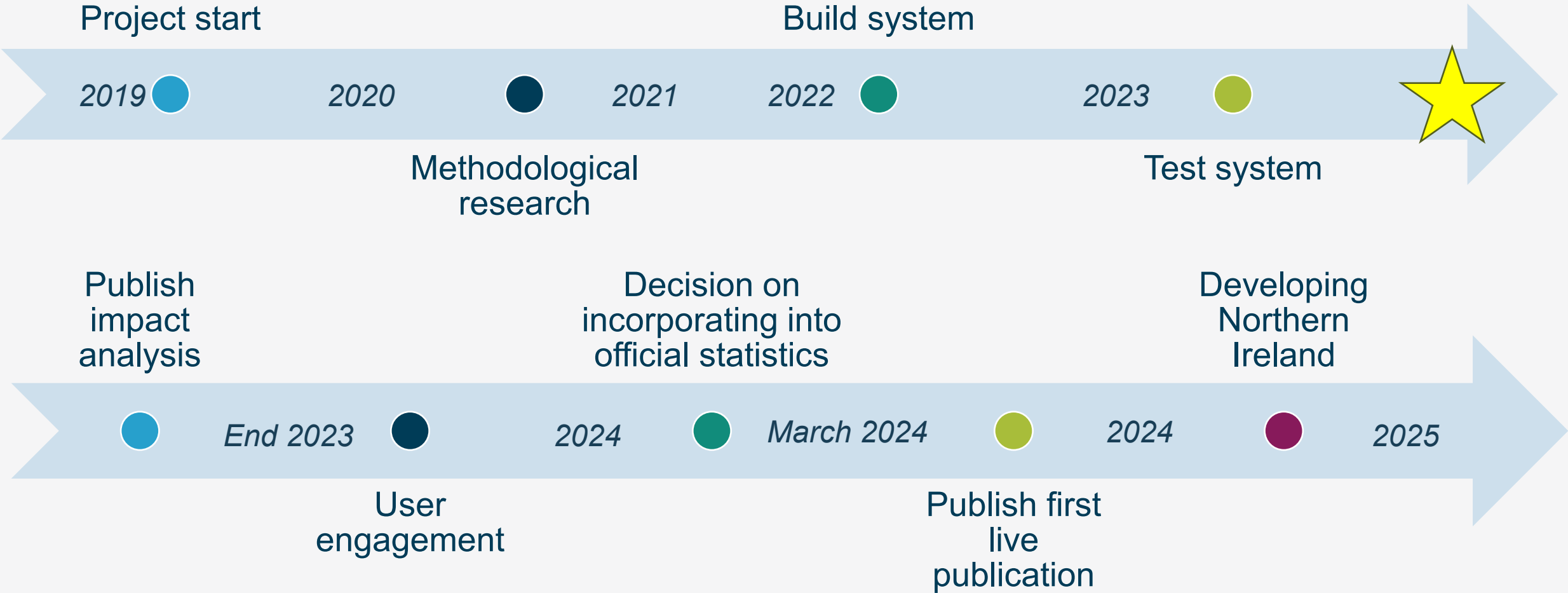
Price index of private rents (PIPR)
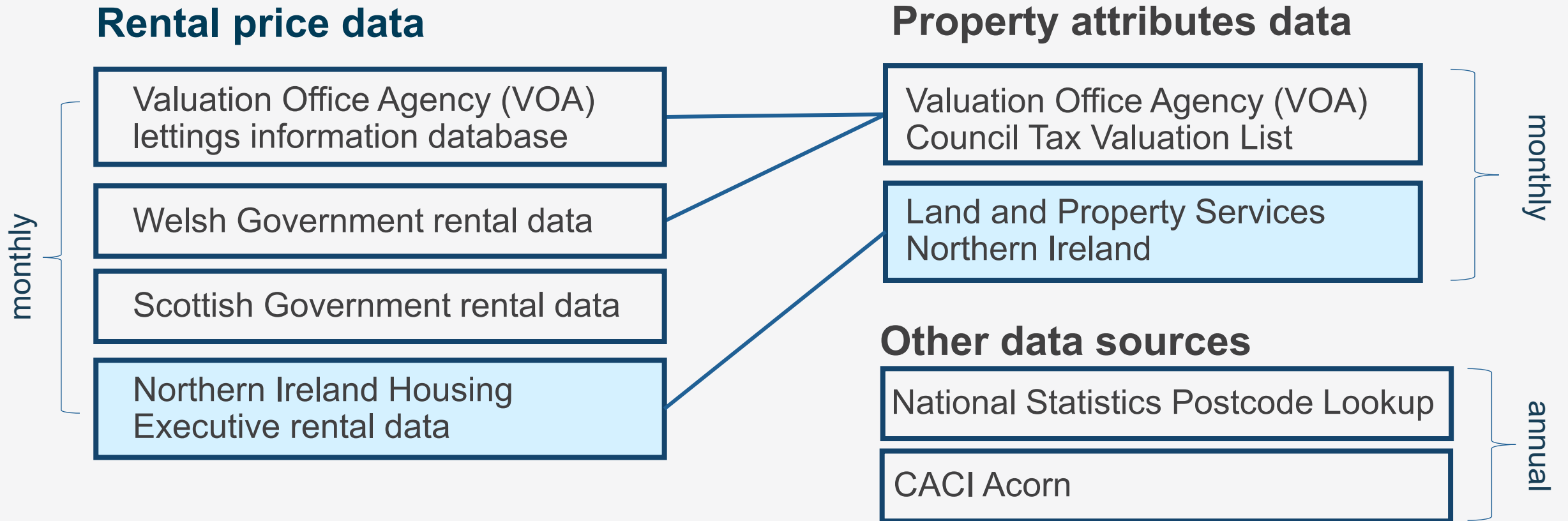
Why are we changing

- Improving rental price statistics – greater trust in our rental price statistics and their use in headline inflation

- Produce more granular statistics – a key ask by users (e.g., by lower geography level)

Chart categories (top to bottom):
- Housing, water, electricity, gas and other fuels
- Food and non-alcoholic beverages
- Alcoholic beverages and tobacco
- Transport
- Recreation and culture
- Restaurants and hotels
- Miscellaneous goods and services
- Furniture, household equipment and maintenance
- Clothing and footwear
- Education
- Communication

Annotations:
- Rental prices (~24% CPIH)
- Grocery scanner data (13% CPIH)
- Rail Delivery Group (transaction) and Auto Trader (web provided) data (2.3% CPIH)

Axis: 0, 5, 10, 15, 20, 25, 30, 35

Timeline

Project start

Build system

2019 • 2020 • 2021 2022 • 2023 • ★

Methodological research

Test system

Publish impact analysis

Decision on incorporating into official statistics

Developing Northern Ireland

• End 2023 • 2024 • March 2024 • 2024 • 2025

User engagement

Publish first live publication

Linking several administrative data sources

Rental price data

Valuation Office Agency (VOA) lettings information database

Welsh Government rental data

Scottish Government rental data

Northern Ireland Housing Executive rental data

monthly

Property attributes data

Valuation Office Agency (VOA) Council Tax Valuation List

Land and Property Services Northern Ireland

monthly

Other data sources

National Statistics Postcode Lookup

CACI Acorn

annual

Office for National Statistics

Rental price statistics: impact analysis

Methodology overview

IPHRP

- Matched pairs approach
- Splits data into a sample and substitution pool
- Region-level analysis

PIPR

- Hedonic regression model
- Uses all data
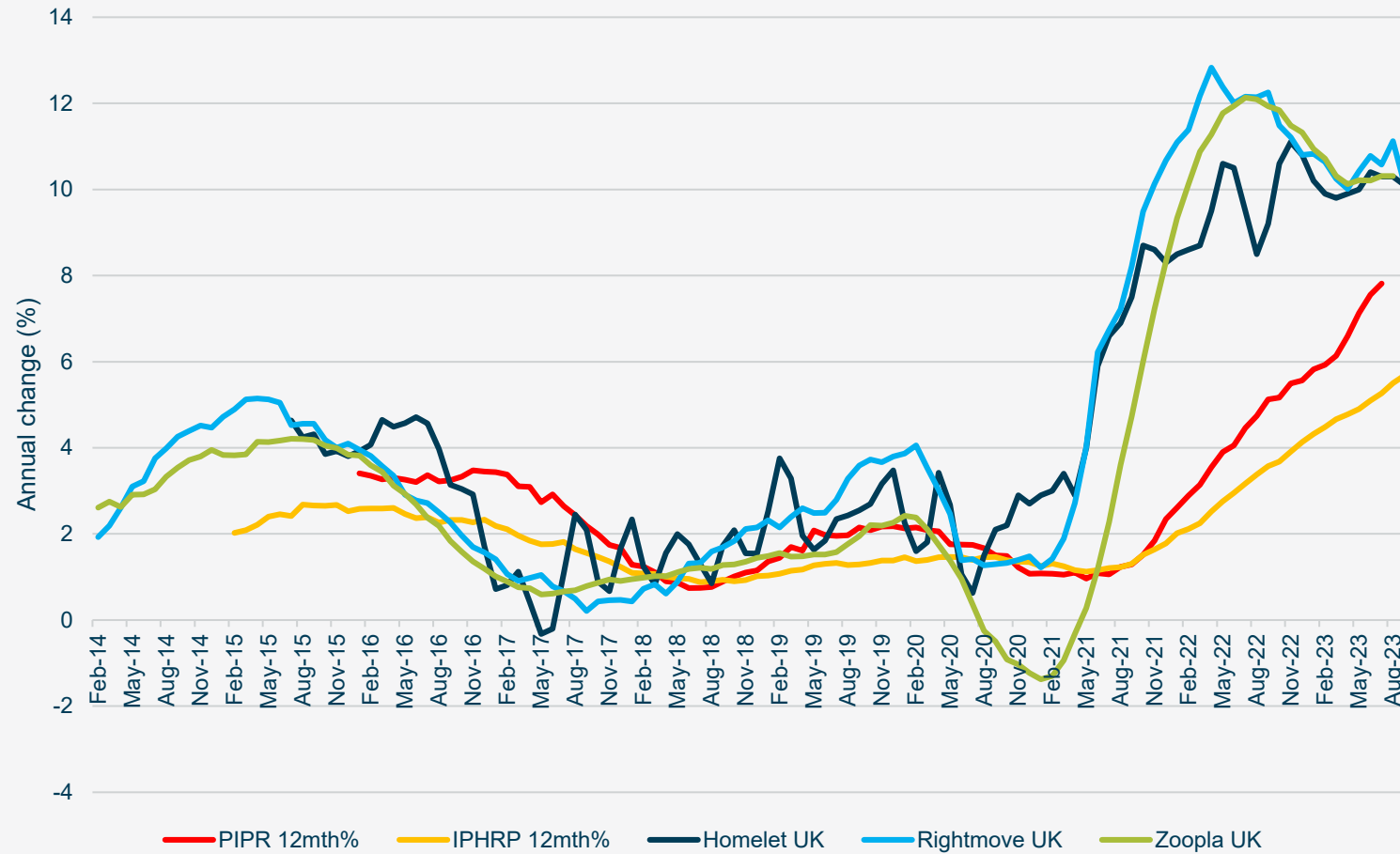- Local authority/BRMA-level analysis

Impact analysis

Rents data

This contains provisional outputs from the Price Index of Private Rents (PIPR). The full impact analysis, containing finalised outputs, was later published on ONS' website on 1 December 2023, which included additional analyses and more recent data.
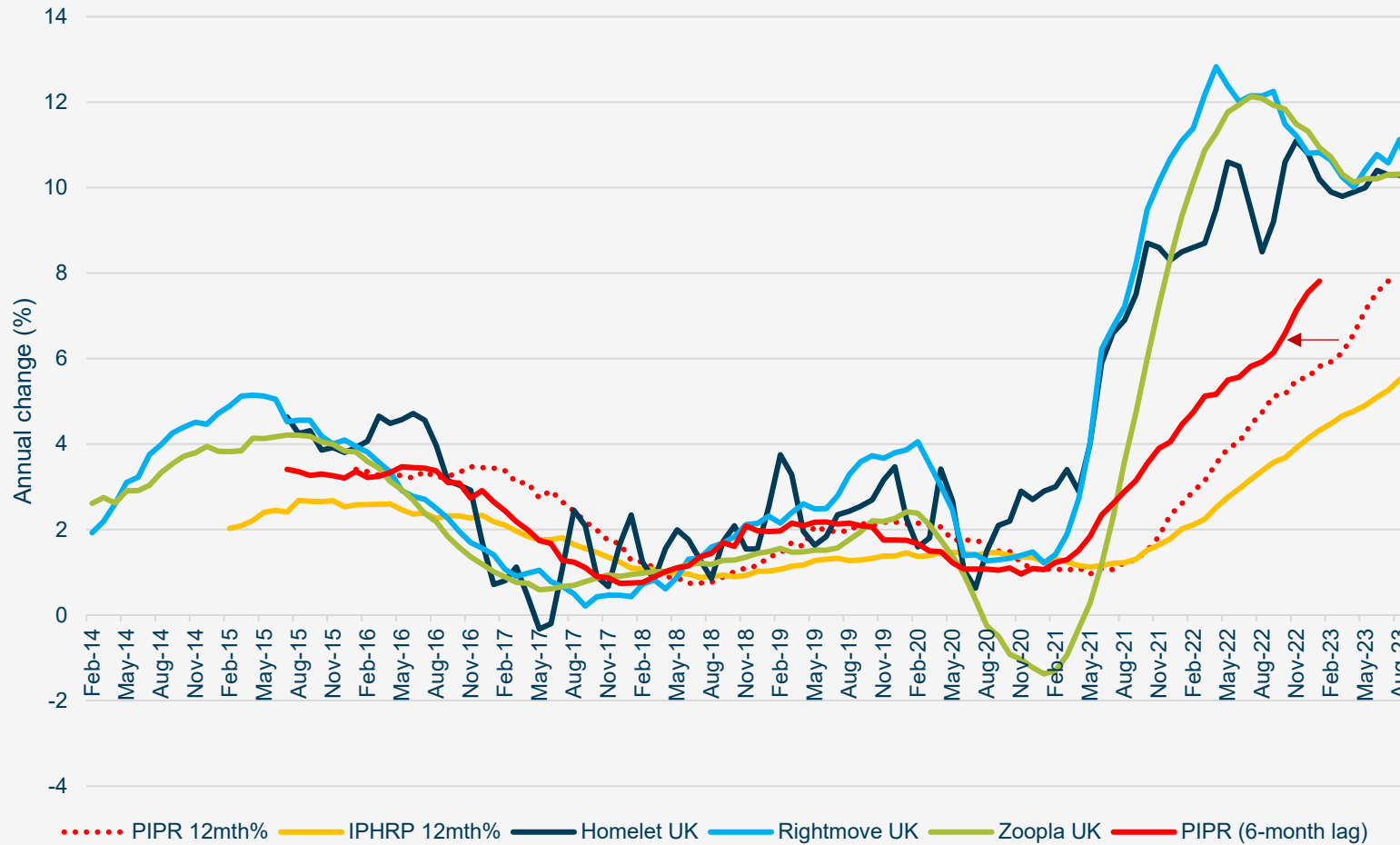
IPHRP vs PIPR: Great Britain
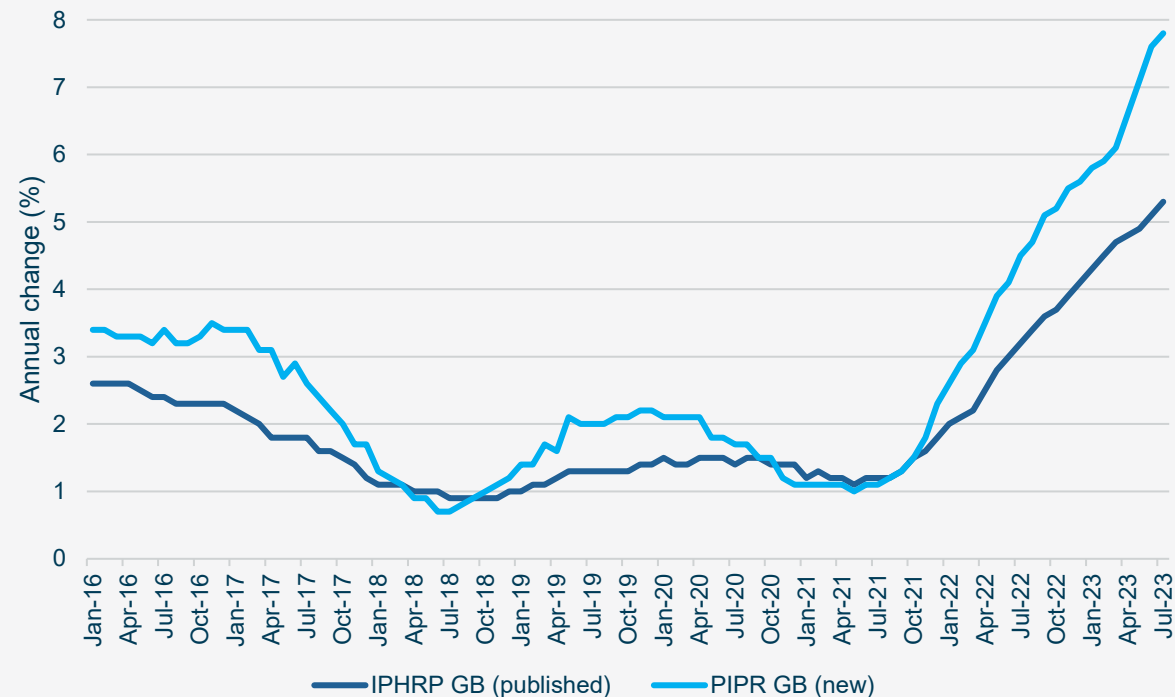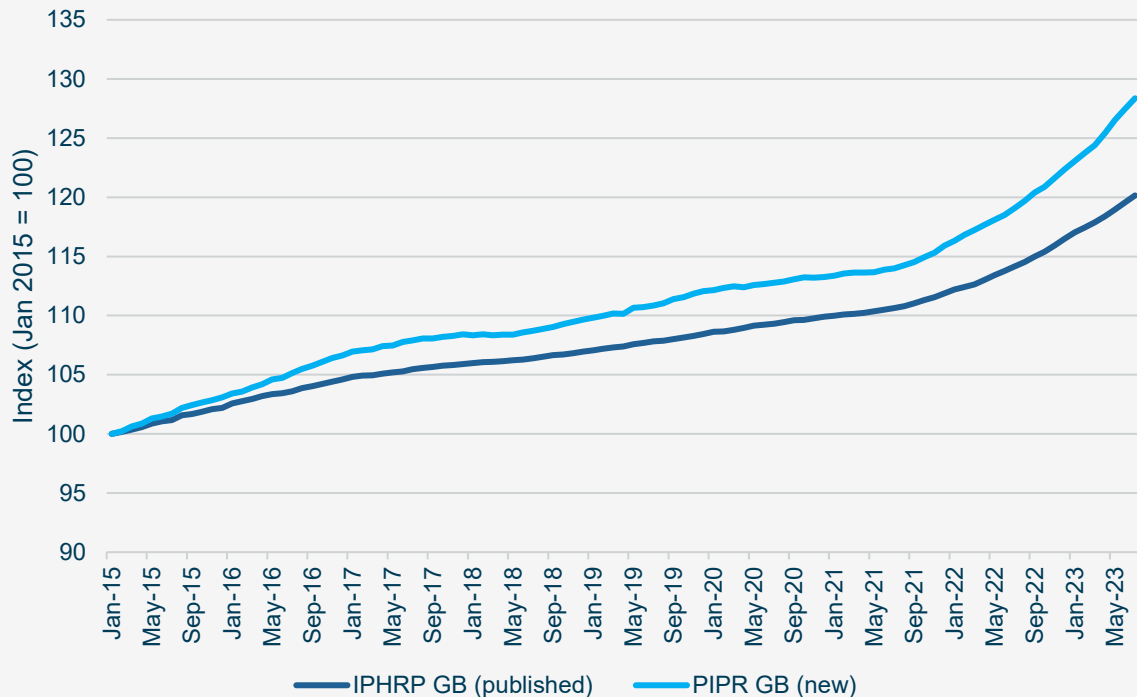
Official Sensitive
Comparison to private sector measures

Rental price statistics: impact analysis
Office for National Statistics

Comparison to private sector measures

Y-axis: Annual change (%)

Legend:
- PIPR 12mth%
- IPHRP 12mth%
- Homelet UK
- Rightmove UK
- Zoopla UK
- PIPR (6-month lag)

Office for National Statistics

Rental price statistics: impact analysis

New information about the rental market

To meet user needs we can now provide data on:

- Local authority indices

- Indices by property type and bedroom category
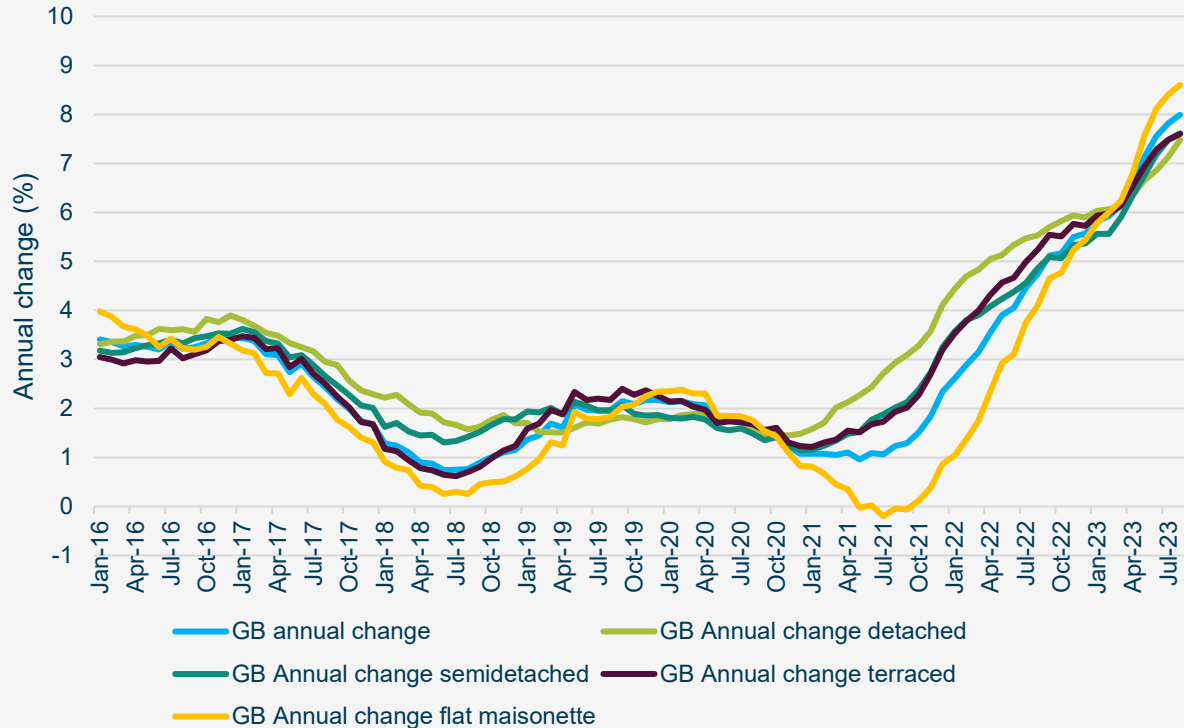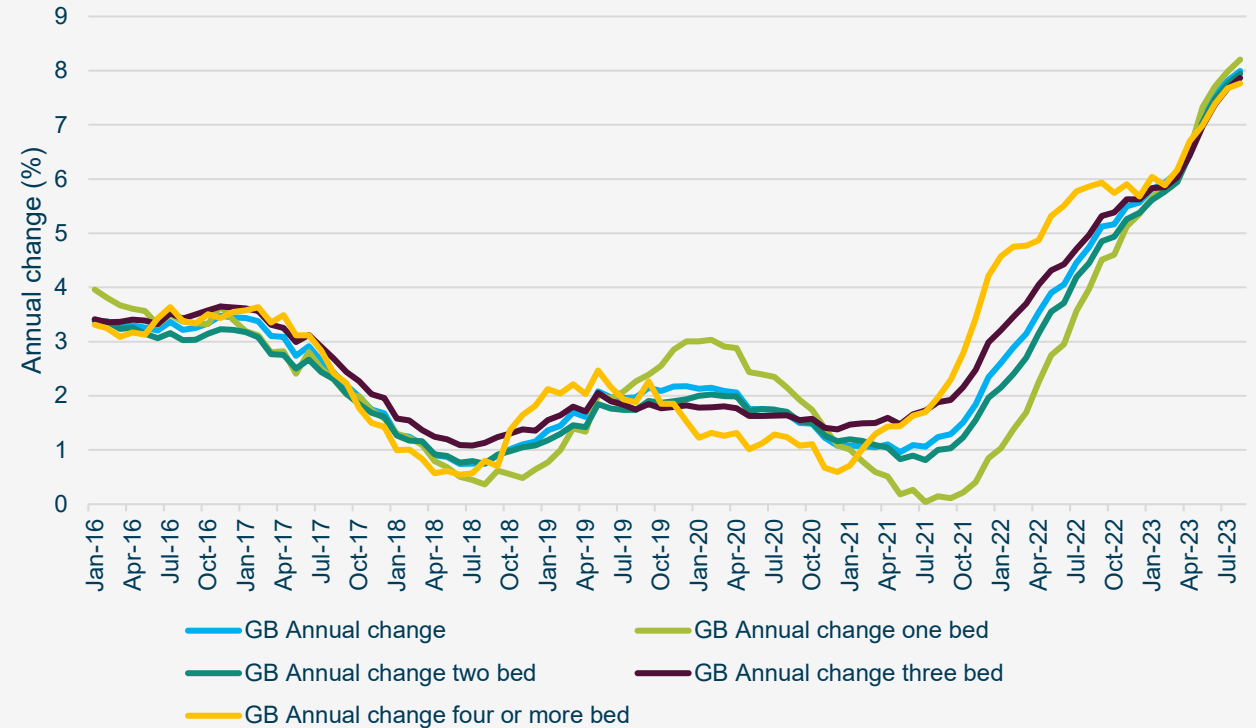
- Price levels comparable over time

Official Sensitive

Local authority level data

Index (Jan 2015 = 100)

Aberdeen and Shire — Argyll and Bute — Ayrshires — Dundee and Angus — East Dunbartonshire — Forth Valley — Greater Glasgow — Highland and Islands

Office for National Statistics

Rental price statistics: impact analysis
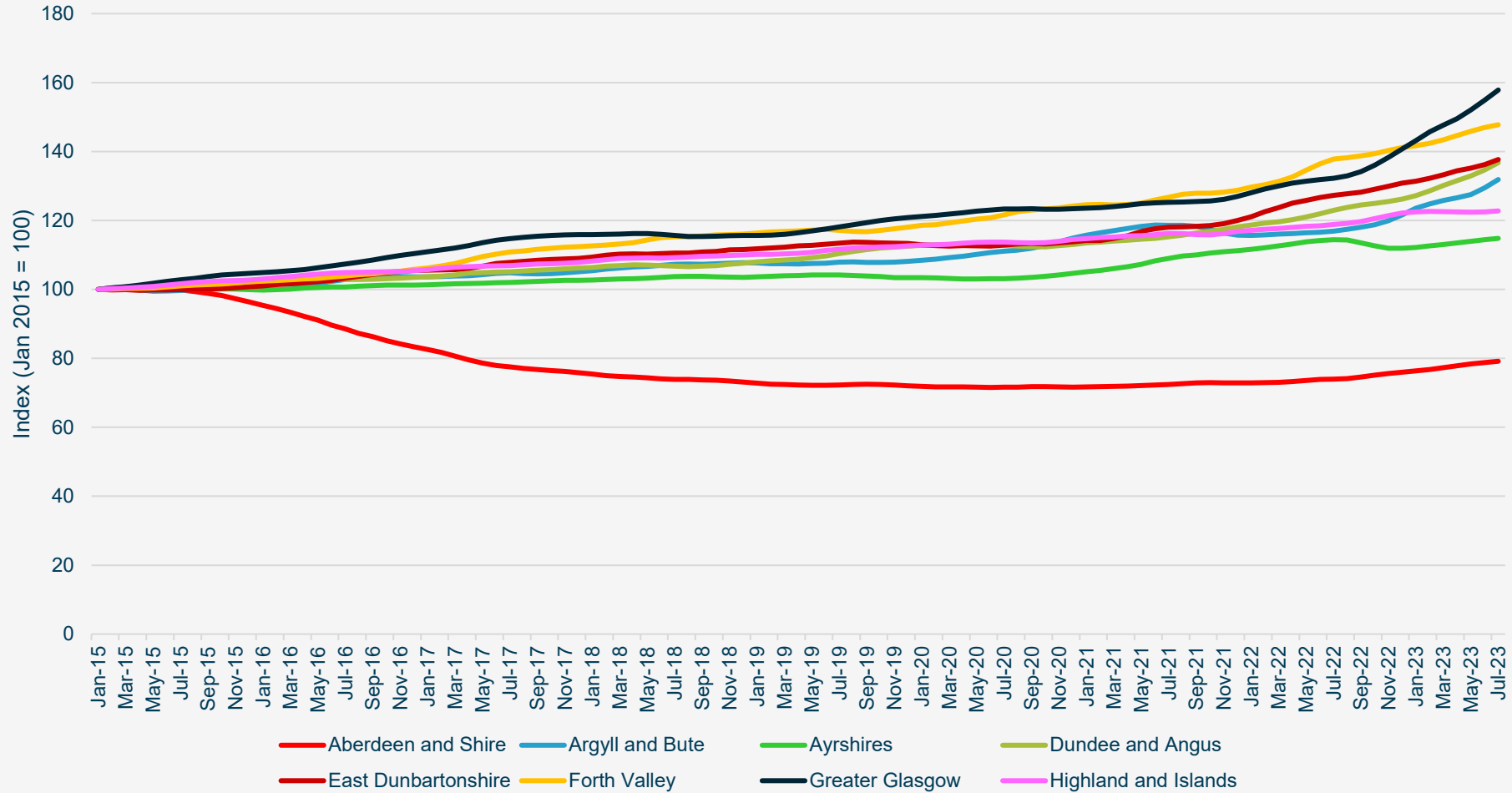
We can now provide greater breakdowns

GB by property type

GB by bedroom category
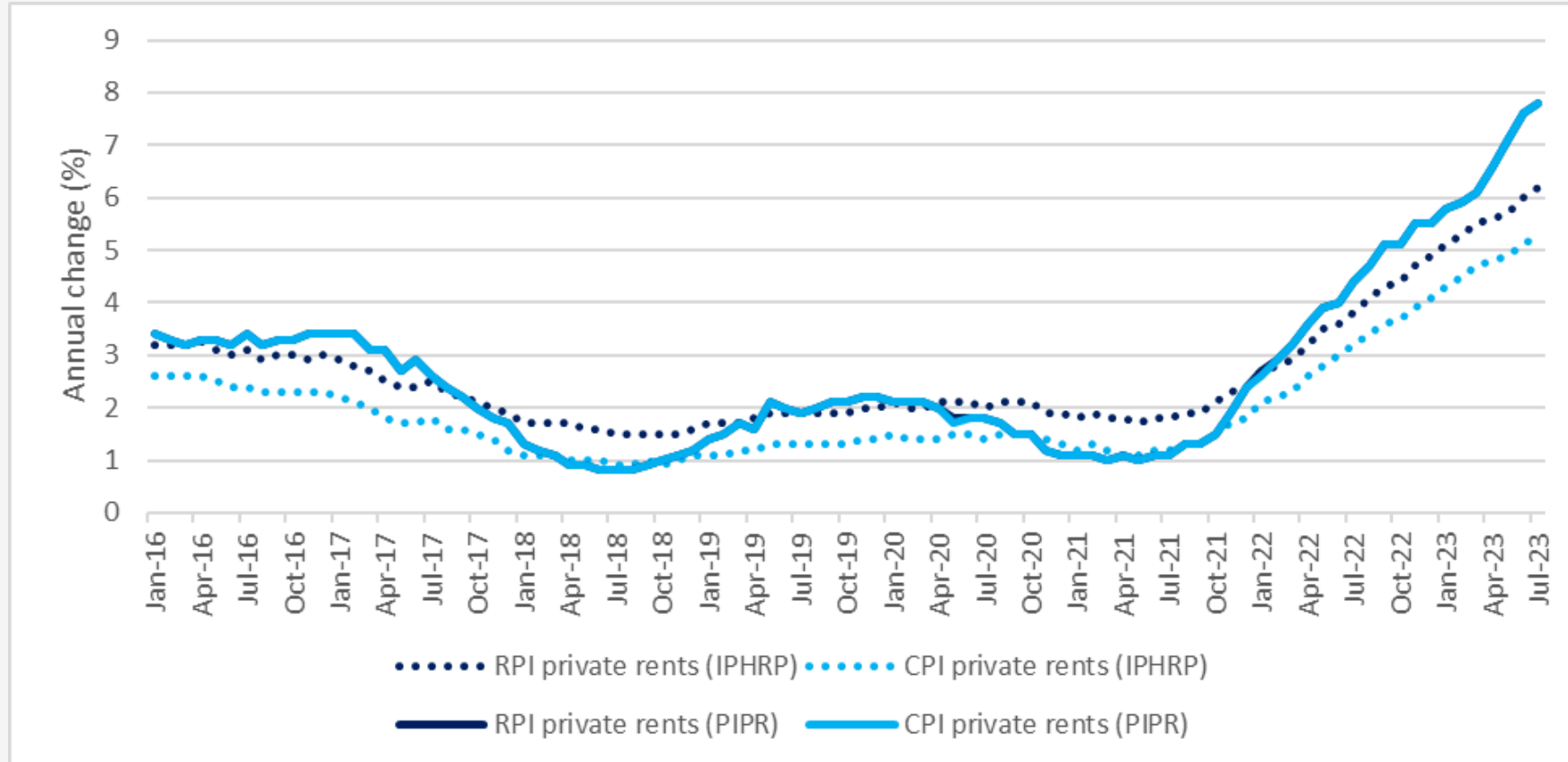
Differences between Carli and Jevons: index
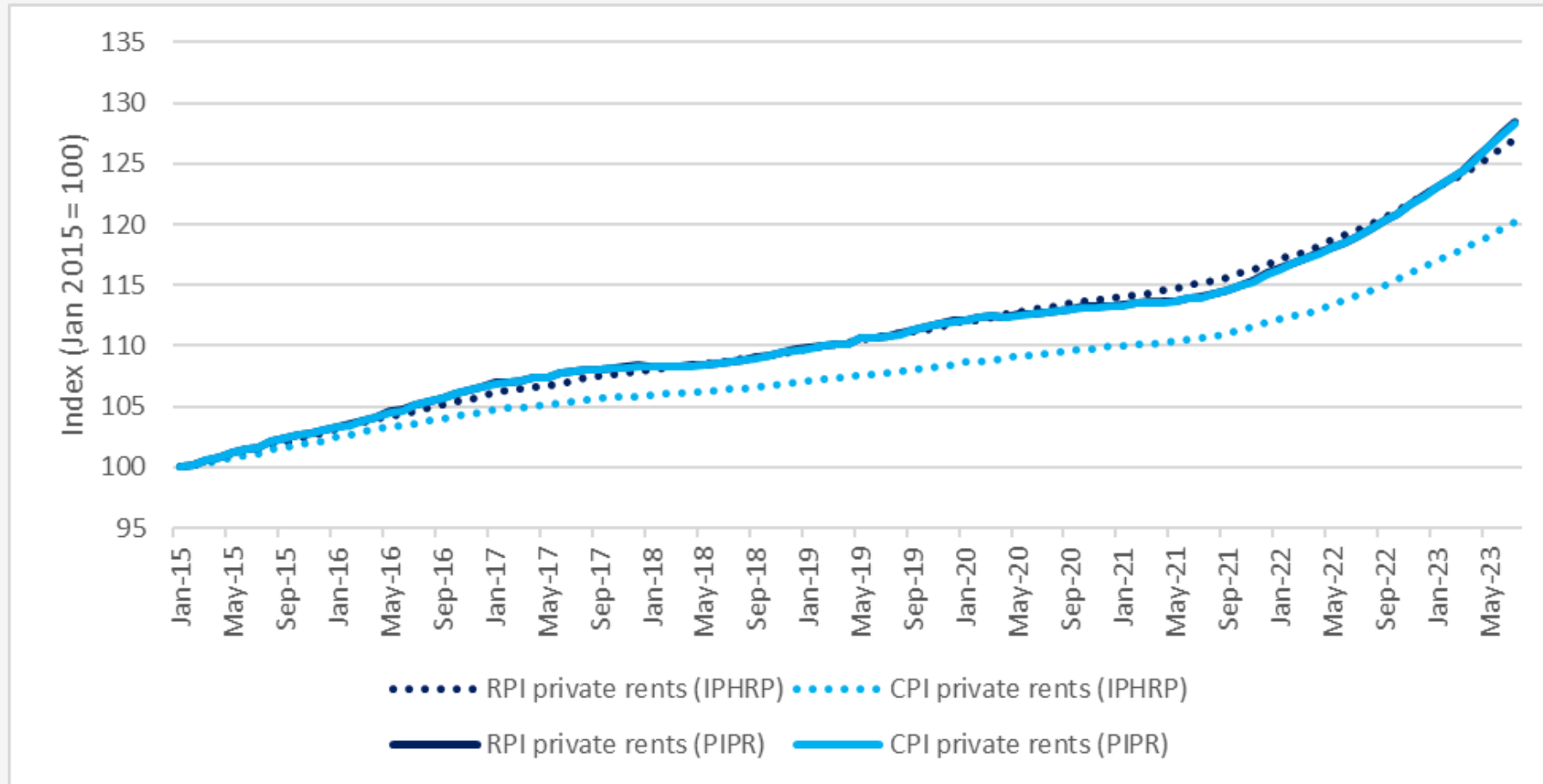
Differences between Carli and Jevons: annual change (1dp)

Impacts on inflation statistics

Official Sensitive
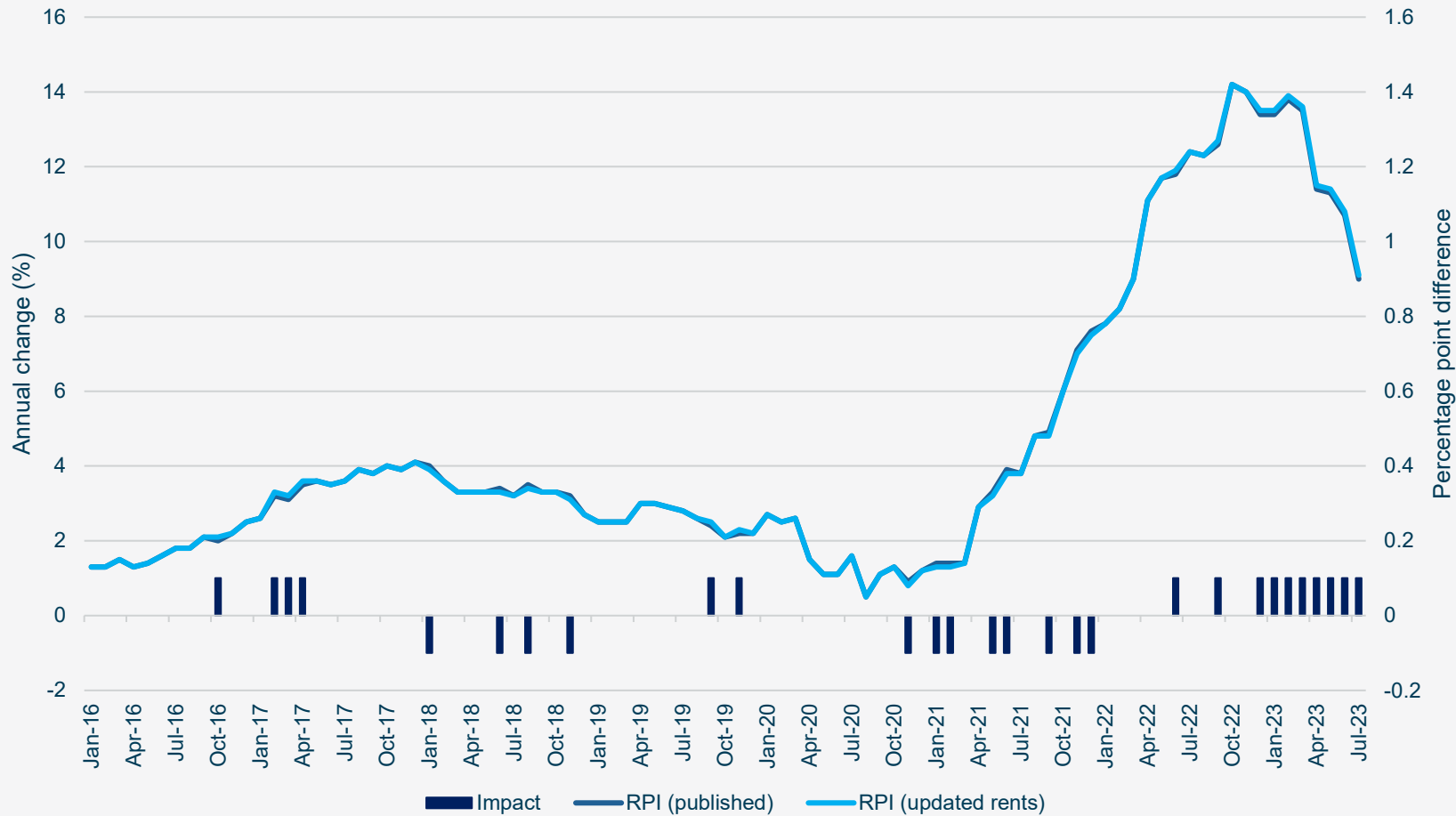
Impact to CPI

Rental price statistics: impact analysis

Official Sensitive

Impact to RPI

Rental price statistics: impact analysis

Office for National Statistics
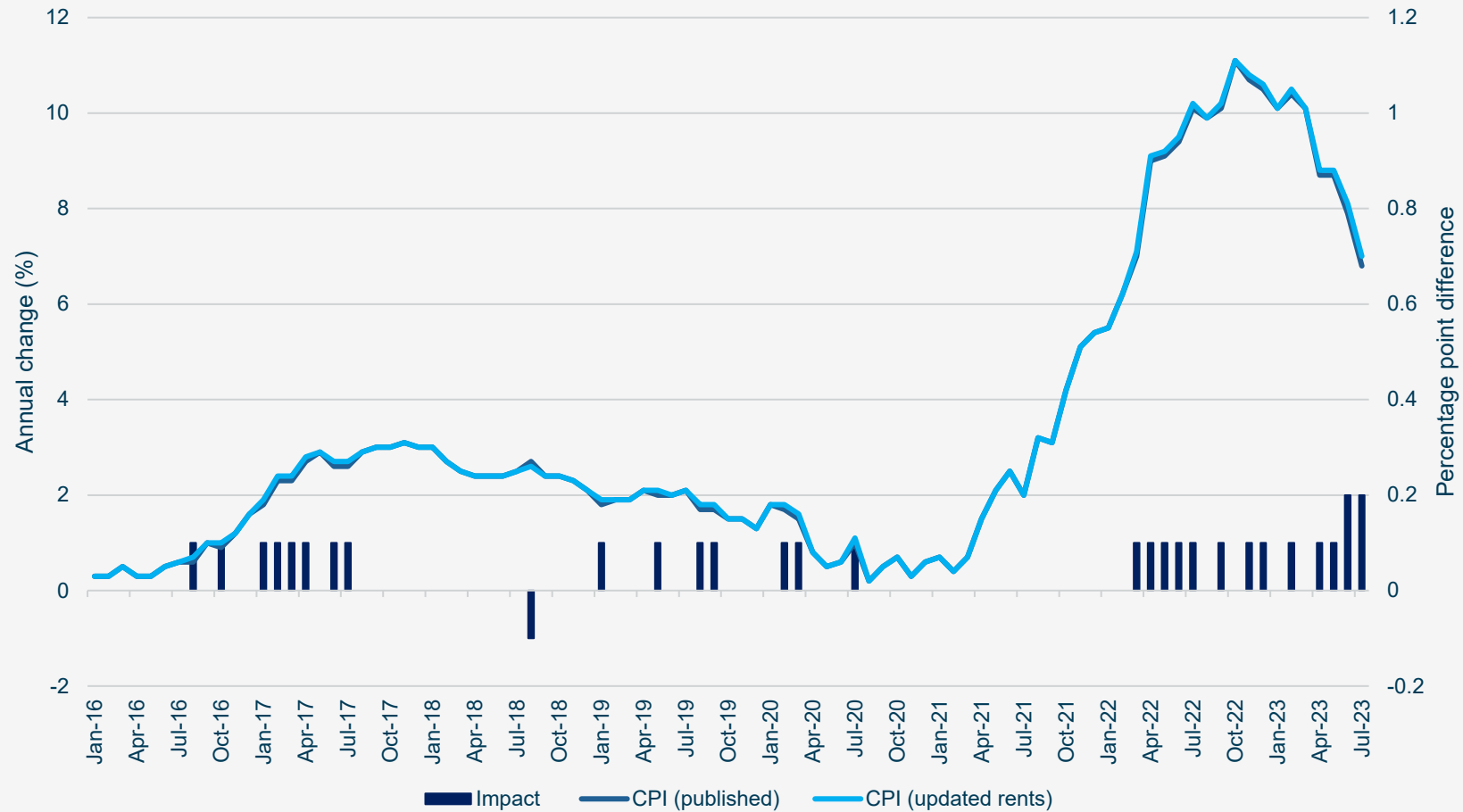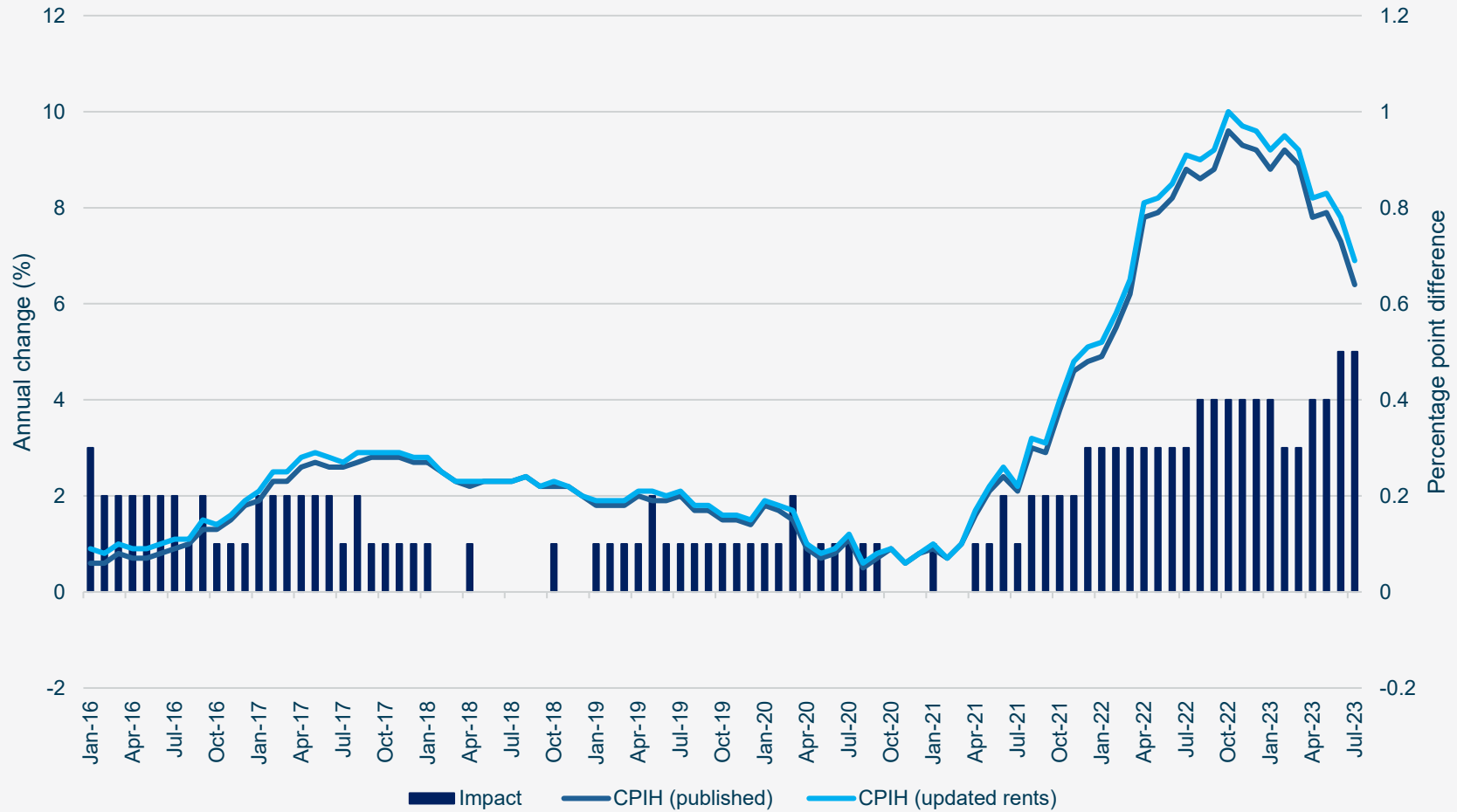
Readiness assessment

Key points

- We have made monumental progress towards transforming Rental price statistics using new data and methods

- We are satisfied with the quality of our indicative impact analysis and do not expect these figures to change significantly

- **However,** there are some small remaining challenges before we implement these data into live production, e.g., Price levels and user engagement

Five areas of consideration for go live decision

- Data

- Methods

- Systems

- Processes

- User engagement & readiness

Data

- The data feed remains the same as what has been used in the IPHRP since the end of 2019

- We've successfully run a historical back series

- Ongoing quality monitoring in place including curiosity sessions to:

  - Interrogate the data

  - Compare outputs from PIPR with outputs from IPHRP

  - Familiarise the production team with the data and understand the changes in the data

Status: Amber/Green

Methods

- The new methodology will use a hedonic regression model like the approach used to calculate the UK House Price Index.

- We researched existing methodologies used for rental prices statistics before developing our future methodology

- We have engaged with stakeholders (such as the Advisory Panels for Consumer Prices), international experts in property price statistics, and have also worked closely with ONS methodology experts to quality assure multiple aspects of the methodology

Status: Amber/Green

Methods

- An internal review has taken place by the Analysis Standards and Pipelines team (ASAP). ASAP is part of the Quality and Improvement Division in ONS. Their advice will form part of our go/no-go decision.

- We have reviewed the methodology against a Time Dummy Hedonic Regression which has produced very similar results

- There are continued discussions on the methodology and its appropriateness with Scottish Government

Status: Amber/Green

Systems

- We have built a fully tested reliable and sustainable system

- Parallel run on the new system will commence in November

- Due to issues with complexity of Northern Ireland's data, we made the decision to postpone the implementation of this until March 2025

- In 2024 (post go-live), there will be a DAP to cloud migration, which we are in conversations with our IT department on implementation

Status: Amber/Green

Processes

- Extensive training, desk instructions and knowledge transfer to the business area to ensure they feel ready for this change and encourage regular feedback following training sessions

- We conducted a readiness survey at the beginning of the year and have since sent a follow up. We have received positives responses agreeing that the business area are ready for the change and feel that they have had or will have had sufficient training before the change take place.

Status: Green

User readiness

- Teach-ins planned with different government departments

- Regular [updates to the APCPs](#)

- Regular OSR meetings

- Regular updates to our [development plan and timeline](#)

- Presented at user events e.g., [Welsh Government Housing Information Group](#)

- Planning our stakeholder engagement alongside our impact analysis release in December

- Continued engagement with users, including the devolved administrations

Status: Amber/Green

Proposal:	Timings:
Conditional **go live** decision, provided: • No significant issues have been raised by stakeholders and users • APCP-S raise no serious user concerns • APCP-T raise no serious method concerns	• Advisory Panels feedback: **27 October 2023** • Internal go/no-go decision: **15 November 2023** • Publish impact analysis on **1 December 2023** • Final decision point **February 2024** • Update users on final decision in **February 2024** • Change implemented from February 2024 onwards, first published in **March 2024**

Discussion

Members of the Advisory Panels are invited to:

- Advise on the acceptability of introducing these new data, methods, systems and processes for rents into live production in 2024, with a particular focus on **user readiness (APCP-S)** and **methods readiness (APCP-T).**

- Advise on user engagement ahead of the go-live