

# The inclusion of owner occupiers' housing costs in the UK CPI

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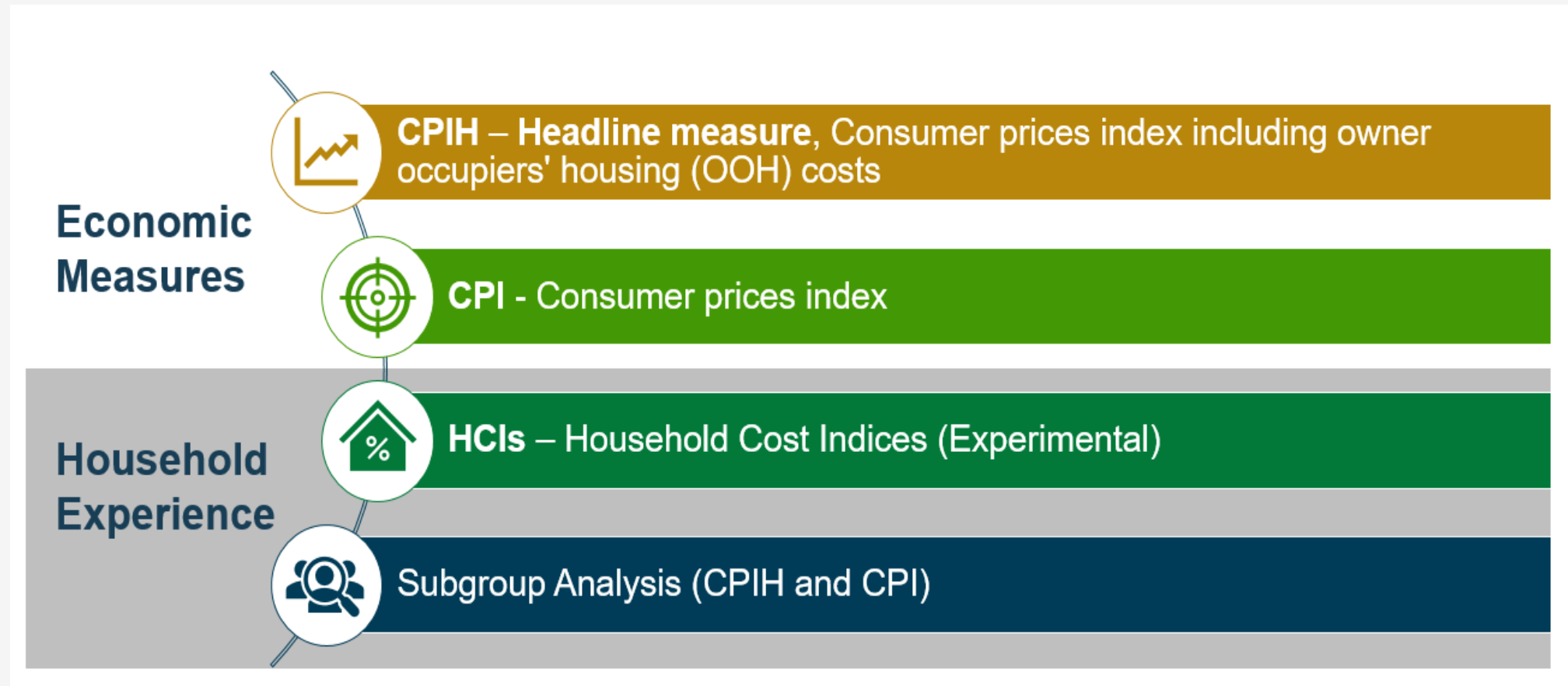
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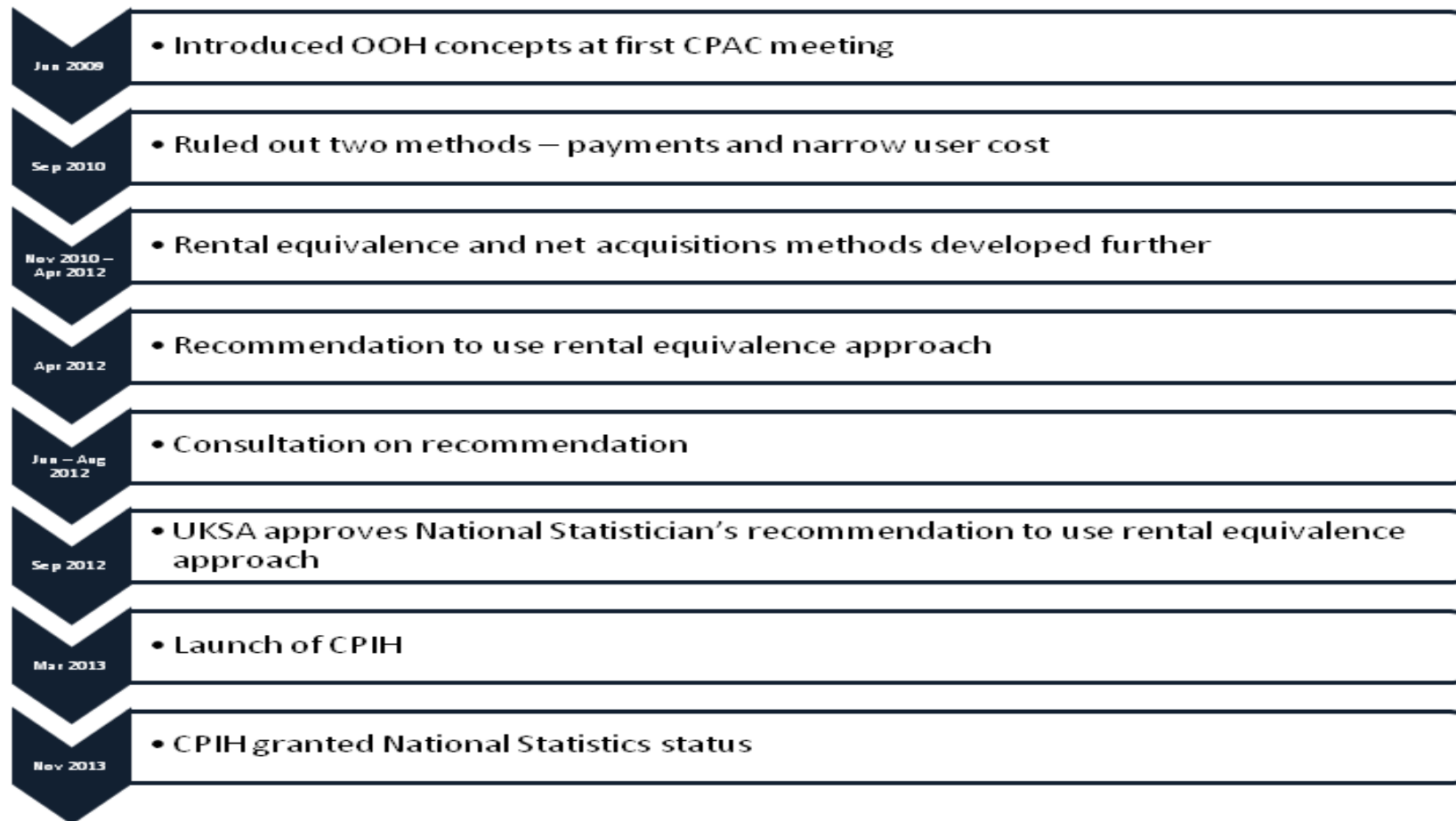
# Content

- The rationale for including OOH in the UK measure of consumer price inflation
- The choice of rental equivalence
- Methods and comparisons

# The UK landscape of consumer inflation statistics



# Chronology of development



# What we use at ONS

Rental equivalence approach

# Rationale for rental equivalence

- Between 2009 and 2013, our Consumer Prices Advisory Committee considered the appropriate choice of OOH method for CPIH
- The payments and narrow user cost approaches were ruled out early
- The net acquisitions and rental equivalence approaches were considered against 7 questions, which align to the 7 GSS quality dimensions

# Rationale for rental equivalence

In summary:

- Rental equivalence is the only approach that properly excludes asset price movements from the index
- It is based on a very good quality data source of roughly half a million private rental prices
- It is consistent with national accounts methodology and is widely used internationally

# Different UK measures of owner occupiers' housing costs



# What are Owner Occupiers' Housing Costs?

- It is **not** the cost of purchasing a house
- The purchase of a house is partly the acquisition of an asset and partly a consumable: we want to try and measure the cost of the *consumable* element
- Owner occupiers' housing costs are the costs associated with owning, maintaining and living in one's home
- Do we measure the price changes at the point of acquisition, use or payment?

# Approaches to measurement

- Full/Narrow user cost
- Rental equivalence
- Net acquisitions
- Payments

# Full user cost approach

Mortgage interest paid

+ Major repairs, maintenance and depreciation

+ Dwelling insurance

+ Interest forgone on capital used

- Capital gains

# Narrow User Cost Approach

- Attempts to measure the cost of consuming housing services directly
- Assumes that we can restate mortgage interest and opportunity cost in terms of the real rate of interest (excluding inflation)

# Narrow User Cost Approach

Average house price x real rate of interest

+ Depreciation

+ Major repairs and maintenance

+ Other running costs

Index is strongly influenced by a subjectively chosen value: the real rate of interest.

# Rental equivalence

- Opportunity costs – measures the forgone value of housing services because the owner occupier chose to live in their home rather than rent it out
- “How much would I have to pay in rent to live in a home like the one I own?”



# Rental equivalence

- Owner occupiers' housing costs are not measured directly – rental equivalence is a proxy for these costs (or an opportunity cost)
- A large rental market is needed for this approach to be valid
- The introduction of rental controls would invalidate this approach

# Rental equivalence: ONS Method

- Rental price data are based on large administrative data sources
- Matched-pairs approach
- Stratified by regions and property type
- Only furnished properties are used
- Stratum price indices are weighted to reflect the owner-occupied population



# A note on stocks and flows

- The prices used give a ‘stock’ measure of rents
- In other words, we are capturing the price of both new and ongoing private rental contracts
- Some recent research suggests that a ‘flow’ measure of rents may be preferable (new lets only)

# Net acquisitions

- We are interested in the change in price of houses acquired by the household sector.
- So, we net off households which are sold within the household sector
- We are also only interested in the consumable element of the house.
- This method assumes that the price of the land is the asset and the price of the dwelling is the consumable.

# Net Acquisitions

Acquisition of new dwellings

- + existing dwellings new to the sector
- + self build housing
- + major repairs and maintenance
- + dwelling insurance
- + transaction costs
- + other services related to dwelling ownership

# Net Acquisitions

## However:

- It is possible to record negative expenditure for existing dwellings new to the sector
- In the UK we do not have separate data on land and dwelling prices – therefore we cannot separate the asset element out

# Payments

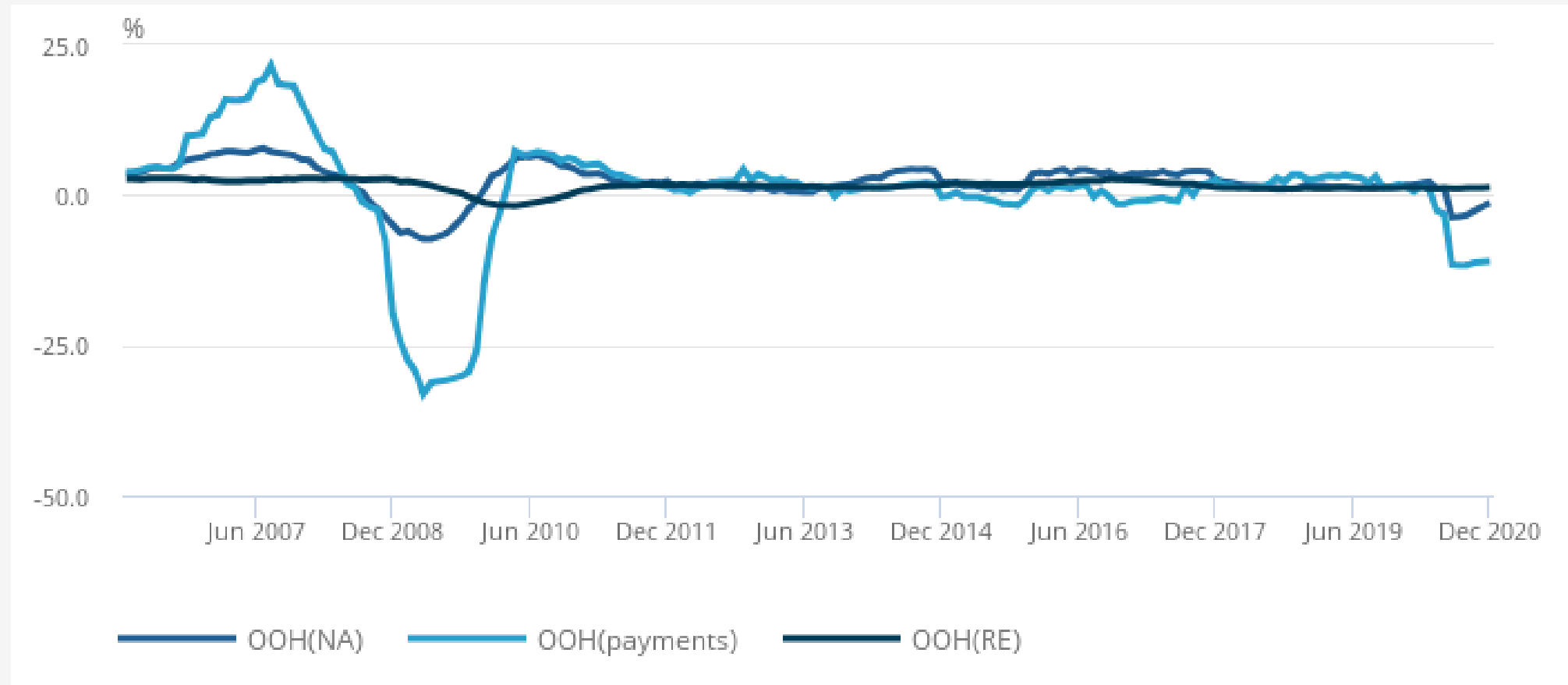
- The payments approach simply looks at the payments owner occupiers make to consume housing services

Mortgage interest payments	+ Estate agents' fees
+ Major repairs and maintenance	+ Homebuyers survey
+ Dwelling insurance	+ Council Tax
+ Stamp duty	+ Ground rent
+ House conveyancing	+ Other house purchasing costs

# Payments

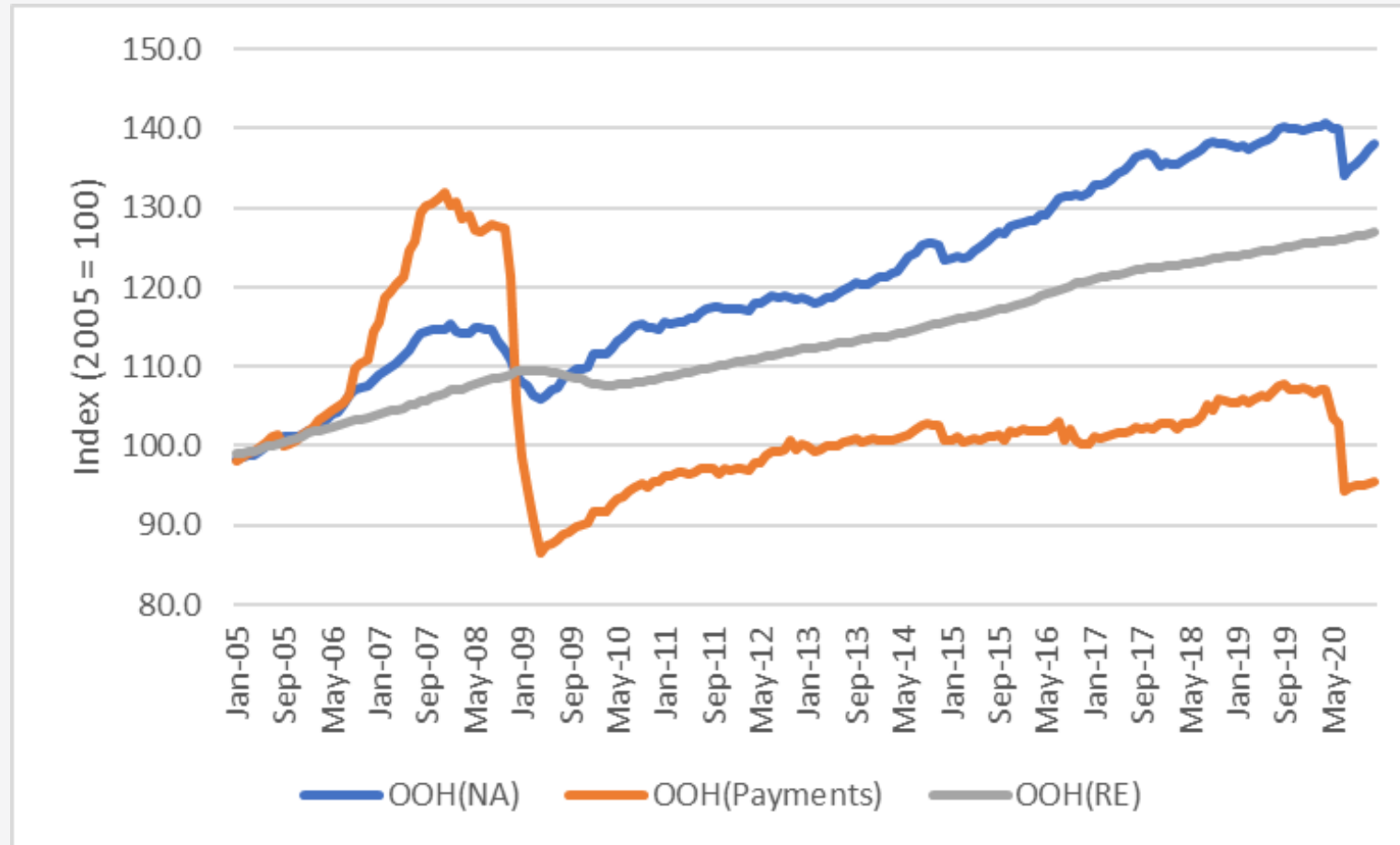
- However, the inclusion of mortgage interest payments creates some problems with this approach:
  - Interest payments represent the cost of borrowing money, which is not a consumption good or service
  - Households also benefit from interest received
  - Including interest payments would make the index unsuitable for monetary policy in the UK, since monetary policy is used to determine interest rates

# How do they compare?



**Source:** Office for National Statistics - Measures of owner occupiers' housing costs

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# What next?

# Future developments

- Redevelopment of private rental prices statistics' work may eventually be used to measure OOH
- Moving to a hedonic regression model approach
- Published our [intended methodology](#) for the approach on the 25<sup>th</sup> March 2022

# Links to resources

- CPIH Compendium

- <https://www.ons.gov.uk/economy/inflationandpriceindices/articles/cpihcompendium/2016-10-13>

- ONS comparison of OOH measures

- <https://www.ons.gov.uk/economy/inflationandpriceindices/articles/understandingthedifferentapproachesofmeasuringowneroccupierhousingcosts/quarter1jantomar2017>
- <https://www.ons.gov.uk/economy/inflationandpriceindices/articles/understandingthedifferentapproachesofmeasuringowneroccupierhousingcosts/januarytomarch2020>

# Any questions?

Thank you

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