# Owner occupied housing in the South African CPI: weighting and pricing

Measurement of Inflation of Owner-Occupied Housing in the CPI – Sprint of the United Nations Network of Economic Statisticians

> Patrick Kelly 24 October 2022

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### Own

### Rent



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# The South African CPI has three primary objectives

- To measure inflation in the economy
- To measure changes in the cost of living of South African households
- To provide a deflator for consumer expenditure in National Accounts

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# South Africa uses imputed rentals to measure OOH

- Prior to 2008 changes in mortgage interest payments were used as a proxy
- Imputed rentals chosen because:
  - Most common practice internationally
  - Easiest to implement
  - Supports objectives of CPI

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# **Over 80% of housing in South Africa is formal**



General household survey, 2021

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### **Owners vs renters**



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# What can the HES tell us about OOH?

#### 3 traditional questions :

1. If you had to rent this dwelling, how much would you pay for it per month?

? Do owners know the rental market?

- 2. What would you estimate the value of the dwelling unit to be?
  - Used this multiplied by a rental yield in 2008

?Do owners know the housing market?

3. Amount paid on mortgage bond – split between capital and interest? *?Useful for payments approach* 

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# Weights are calculated through matching method

**HES records characteristics of the dwelling:** Now use this to match owned and rented dwellings to obtain rental value

Variable
Province
Municipality
Type of settlement: urban/rural/formal/informal/farm/traditional
Type of dwelling: Apartment/house/house in complex/room/shack
Number of bedrooms
Number of bathrooms
Number of kitchens
Number of multi-purpose rooms
Garages (for number of cars)
Number of living rooms
Number of dining rooms

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### Weights are calculated through matching method

OOH Expenditur	OOH data					Rental data			
nt Σ	Imputed rent value	Quantity	Combo	Dwelling type	Area	Average rent	Combo	Dwelling type	Area
68	2 260 268	214	А	House	Cape Town	10 562	А	House	Cape Town
32	1 778 532	186	В	House	Cape Town	9 562	В	House	Cape Town
.86	406 186	74	С	Flat	Cape Town	5 489	С	Flat	Cape Town
.24	60 424	28	D	Flat	Cape Town	2 158	D	Flat	Cape Town

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### Some variation in OOH/rental weight



#### Weight of imputed and actual rents

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### House type composition is different



#### **Composition of expenditure**

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### How the rental market works

- No price regulation
- No regulator (no admin data available)
- Minimal government supply of rental units
- Property agents (Estate agents) commonly appointed to find and contract with tenants
- Contracts signed for 12 months (or shorter) with renew option
- Escalation rate is not normally fixed

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# Rental prices collected by field survey

- Sample of 3 500 rental units
- Rents recorded each quarter
- Fieldworkers visit rental agencies
- Rental price for that quarter recorded
- Follow matched model approach

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### Rental inflation is stable and lags change in CPI



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### **Issues** ahead

- Adjust OOH weights for insurance, maintenance etc
- Extend mix of dwelling types depending on next HES
- Increase sample size

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# Thank you

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