The cost of a house vs. the cost of housing

Faouzi Tarkhani and Patrick Sabourin
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Motivation: how should housing be measured in CPI?

Cost of houses

Public: House prices

Cost of housing

Perception-measurement gap?

CPI: OA measure
Source of inflation perception—measurement gap?

Growth in house prices has tended to be greater than cost of housing

Year-over-year percentage change

Source: Statistics Canada and Bank of Canada

Last observation: 2020Q2
Differences between cost of houses and housing: the role of asset prices

IN SCOPE
- Stock and bond commissions
- Cost of housing
- Consumption expenditures

OUTSIDE SCOPE
- Investments
- Life insurance
- Financial assets
- Houses

CPI
MOTIVATION AND CONTEXT
ALTERNATIVE APPROACHES FOR COST OF OWNED ACCOMMODATION (OA)
IMPACT OF ALTERNATIVE APPROACHES TO ALL-ITEM CPI
WHICH APPROACH IS BETTER?
SUMMARY
Main aspects of OA

Payment for it
(Cost of houses & housing)

Acquisition of it
(Cost of houses)

Use of it
(Cost of housing)
Main treatments of OA in CPI

- Rental Equivalence
- Opportunity Cost
- User Cost
- STC Payments
- Acquisition
- Exclusion
Statistics Canada OA approach

That approach measures the impact of price changes on the costs incurred by homeowners while they own a home.
OA components

Mortgage Interest Costs (MICI)
Replacement Costs
Property Taxes Including Special Charges
Homeowners' Insurance Premiums & Mortgage Insurance
Homeowners' Maintenance & Repairs
Other Expenses
House prices are included in some components OA directly

Replacement costs (NHPI ex. land), Home insurance, Property tax, Mortgage interest costs-MICI (NHPI), Commission on sale of real estate.

Sources: Bank of Canada and Statistics Canada calculations

Last observation: April 2020
RENTAL EQUIVALENCE

Treat homeowners as renters of their house and track the costs of using it.
Rental equivalence components

- Equivalent Rent
- Homeowners’ Insurance Premiums (RE)
- Homeowners’ Maintenance and Repairs (RE)
Increased prevalence of rents in CPI leads to weaker inflationary pressures

Owned Accommodation
Year-over-year percentage change

- Statistics Canada OA
- Rental Equivalent
ACQUISITION

Track the prices paid by households for acquiring principal dwellings like any other goods in CPI.
Acquisition components

- Home Purchase (flows of newly build & existing dwellings)
- Homeowners Insurance Premiums
- Property Taxes Including Special Charges
- Homeowners' Maintenance and Repairs
- Other Expenses
Increased prevalence of house prices in CPI leads to stronger inflationary pressures
PAYMENTS

Owned accommodation service is equivalent to the actual payments made by homeowners.
Payments components

- Mortgage Interest Cost
- Homeowners Insurance Premiums & Mortgage Insurance
- Property Taxes Including Special Charges
- Homeowners' Maintenance & Repairs
- Other Expenses
Actual payments by homeowners show similar price pressures to official OA

Owned accommodation
Year-over-year percentage Change

Statistics Canada OA
Payments
USER COST

Treats the homeowner as a landlord and accounts for the costs of using the house.
User cost components

Opportunity Cost

Foregone Capital Gain

Expected Appreciation of Own House

Mortgage Interest Costs

Replacement Costs

Property Taxes Including Special Charges

Homeowners Insurance Premiums and Mortgage Insurance

Homeowners Maintenance and Repairs

Other Expenses

Expected Appreciation of Own House

Foregone Capital Gain

Opportunity Cost
User-cost inflation is significantly more volatile than the official measure.
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04 WHICH APPROACH IS BETTER?

05 SUMMARY
Different approaches give a wide range of possibility for OA
The acquisition approach shows the fastest rate of growth in CPI inflation
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SUMMARY
Which approach is better?

Criteria for evaluating OA approaches

**Target = Cost of housing not houses**

**Practical Considerations**
- Data limitations

**Monetary Policy Perspective**
- Gap with households perceptions
- Volatility
Increased prevalence of house prices in CPI helps narrow the perception-measurement gap

Total CPI by all approaches vs consumer perceptions
Year-over-year percentage change

Sources: Bank of Canada and Statistics Canada calculations

Last observation: 2020Q1
But it increases volatility

Volatility in indexes of owned accommodation and total CPI

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<th>Acquisition</th>
<th>Rental equivalence</th>
<th>User cost</th>
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<tr>
<td>OA indexes</td>
<td>1.33</td>
<td>1.47</td>
<td>2.25</td>
<td>0.52</td>
<td>2.01</td>
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<tr>
<td>Total CPI</td>
<td>0.83</td>
<td>0.83</td>
<td>0.90</td>
<td>0.76</td>
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Standard deviation of year-over-year growth rates, 2004–20
Summary of evaluation: no clear winner but cost of housing more relevant for CPI

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<th>Approaches</th>
<th>Target Cost of Housing</th>
<th>Practical Considerations Data Limitations</th>
<th>Monetary Policy Volatility</th>
<th>Perception Gap</th>
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<tr>
<td>Official</td>
<td>+</td>
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<tr>
<td>Rental equivalence</td>
<td>+</td>
<td>-</td>
<td>+</td>
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<tr>
<td>Acquisition</td>
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Summary

Increased prevalence of house prices in CPI leads to higher inflation thus narrowing the gap with perceived inflation.

While no approach is a clear winner, those more aligned with cost of housing are more relevant for measuring CPI.

Actual approach represents an acceptable compromise in the current context of low and stable inflation.
THANK YOU
QUESTIONS?