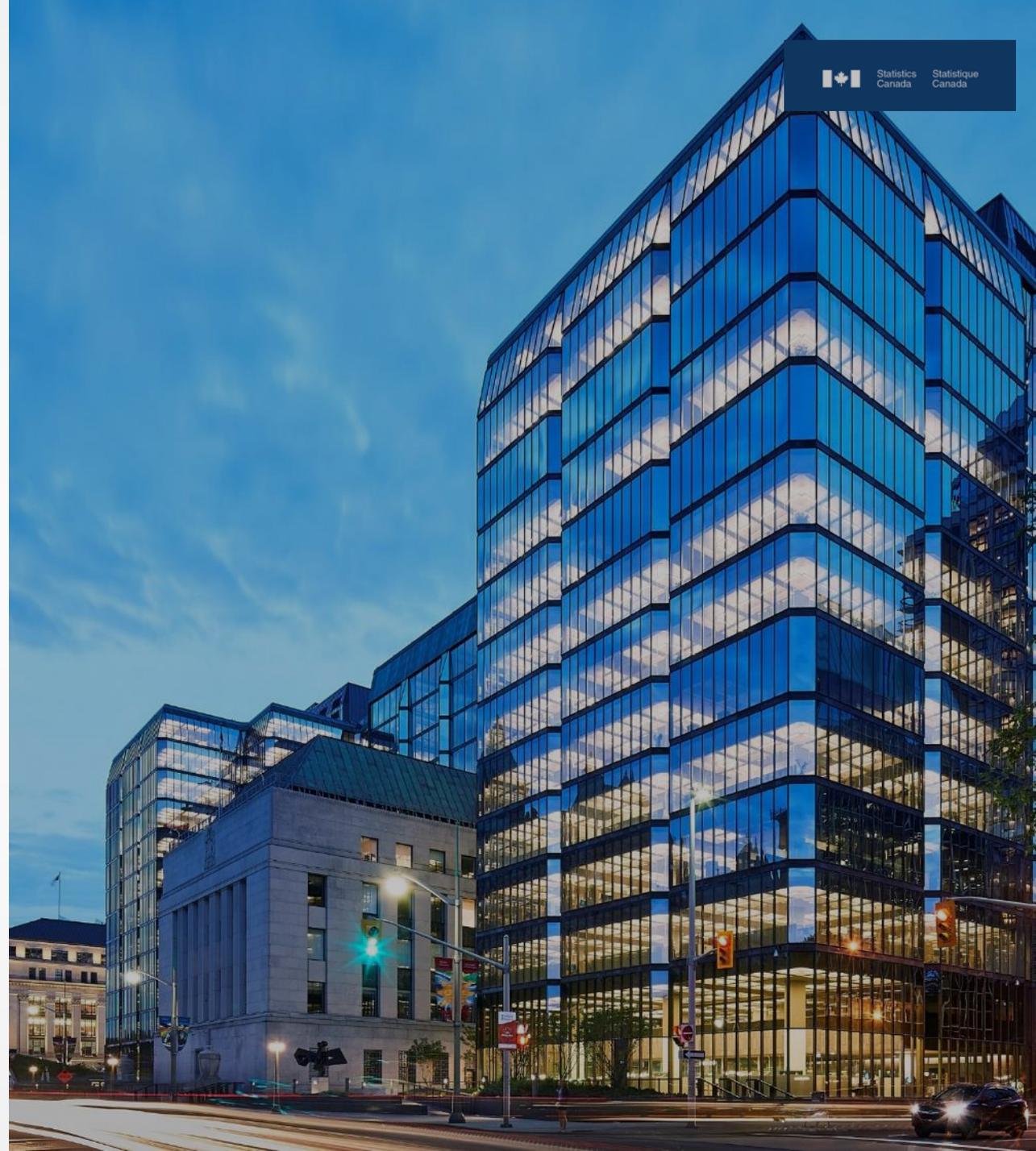


The cost of a house vs. the cost of housing

Faouzi Tarkhani and Patrick Sabourin



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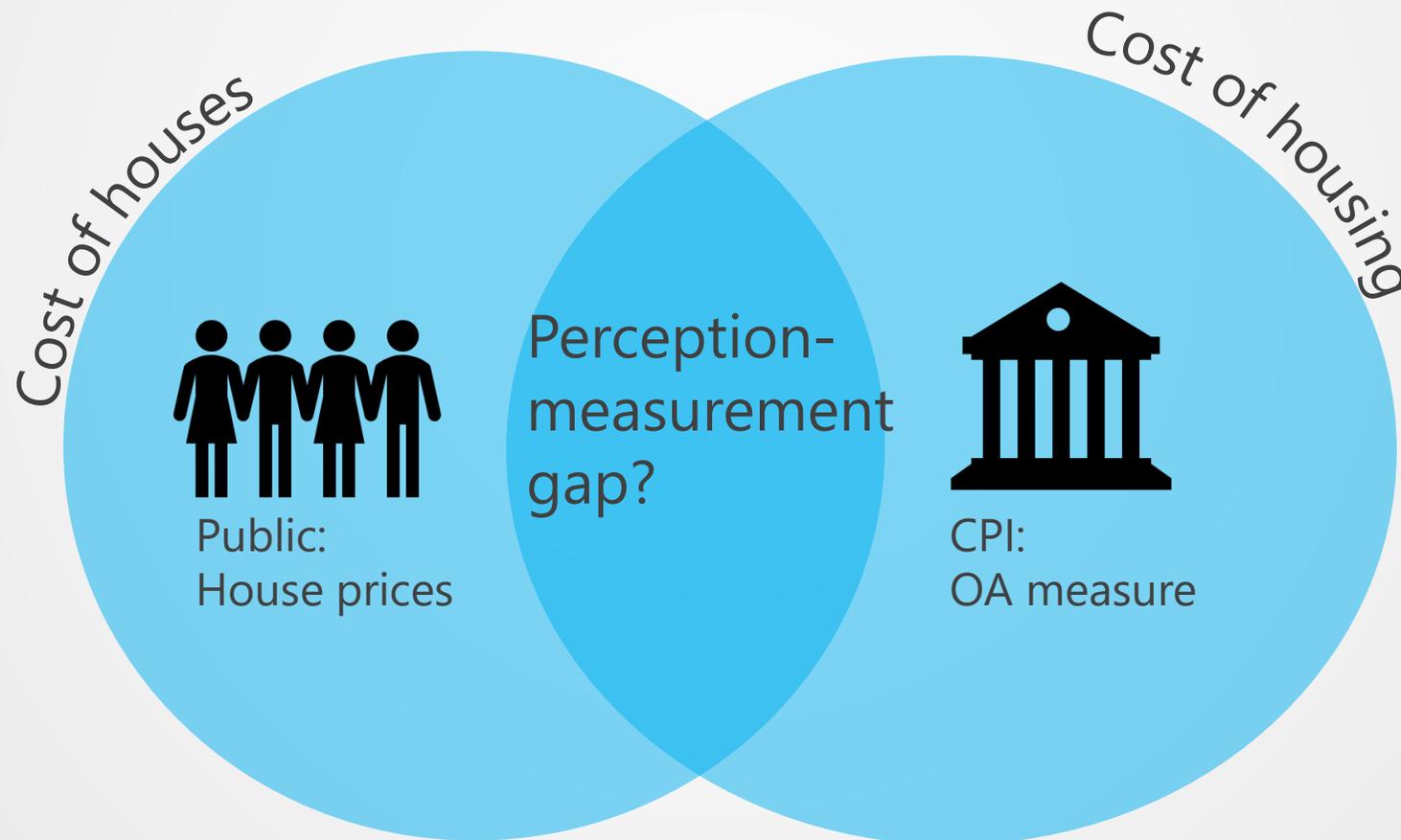
04

WHICH APPROACH IS BETTER?

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SUMMARY

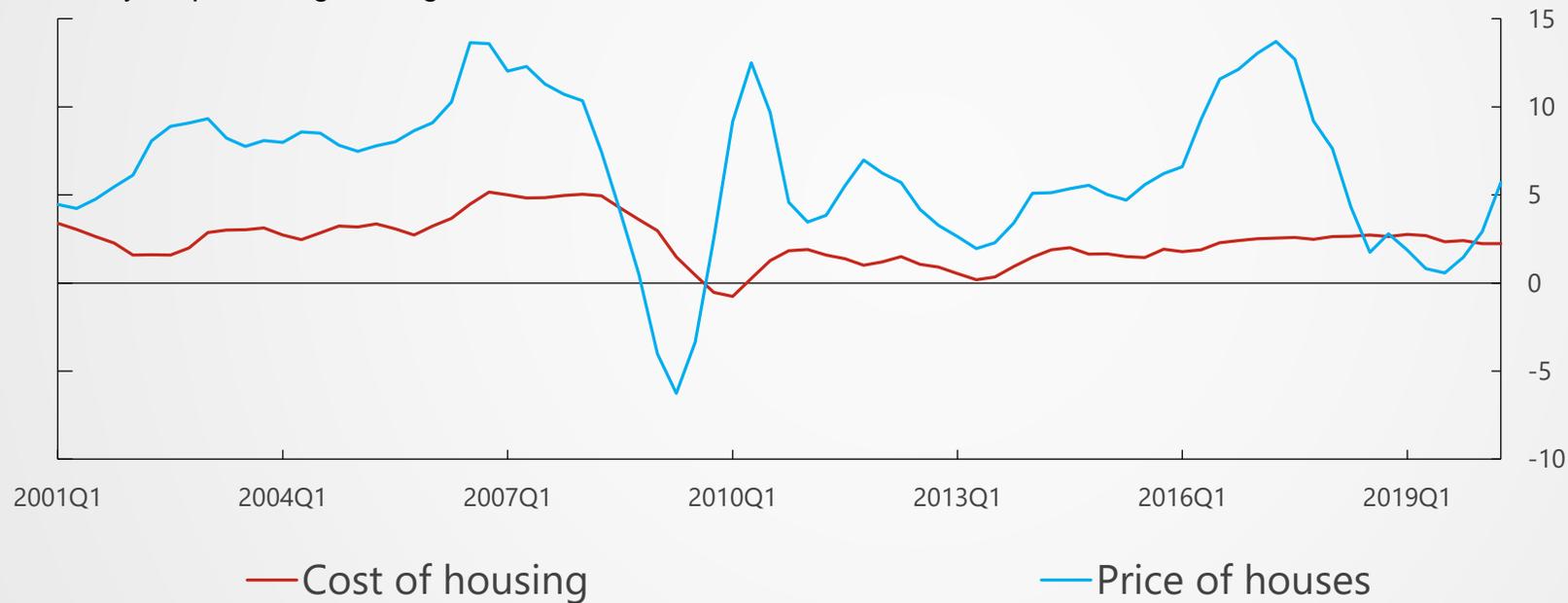
Motivation: how should housing be measured in CPI?



Source of inflation perception-measurement gap?

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

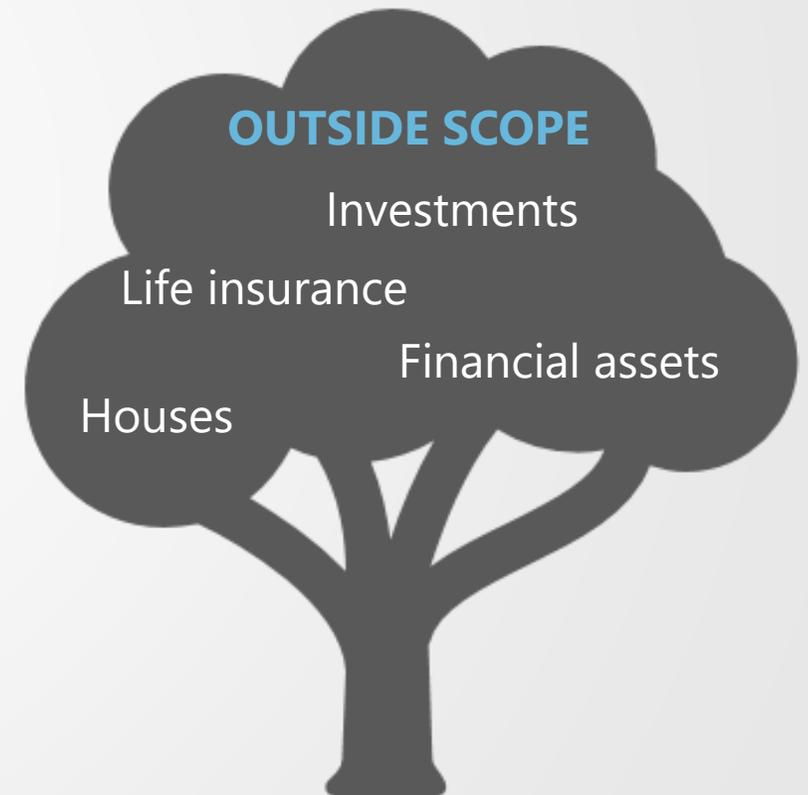
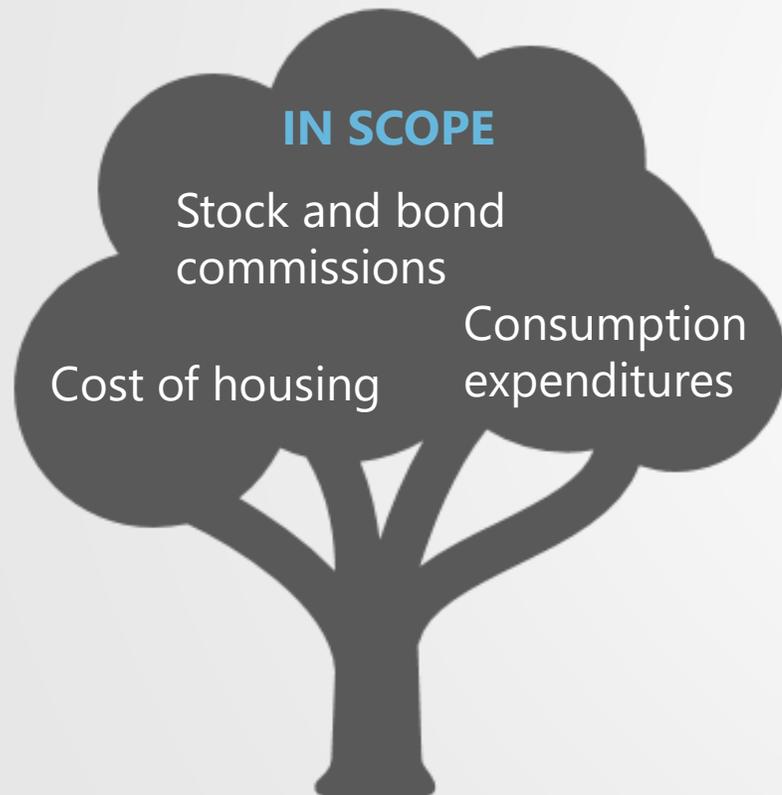
Year-over-year percentage change



Source: Statistics Canada and Bank of Canada

Last observation: 2020Q2

Differences between cost of houses and housing: the role of asset prices



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Main aspects of OA



Payment for it
(Cost of houses & housing)

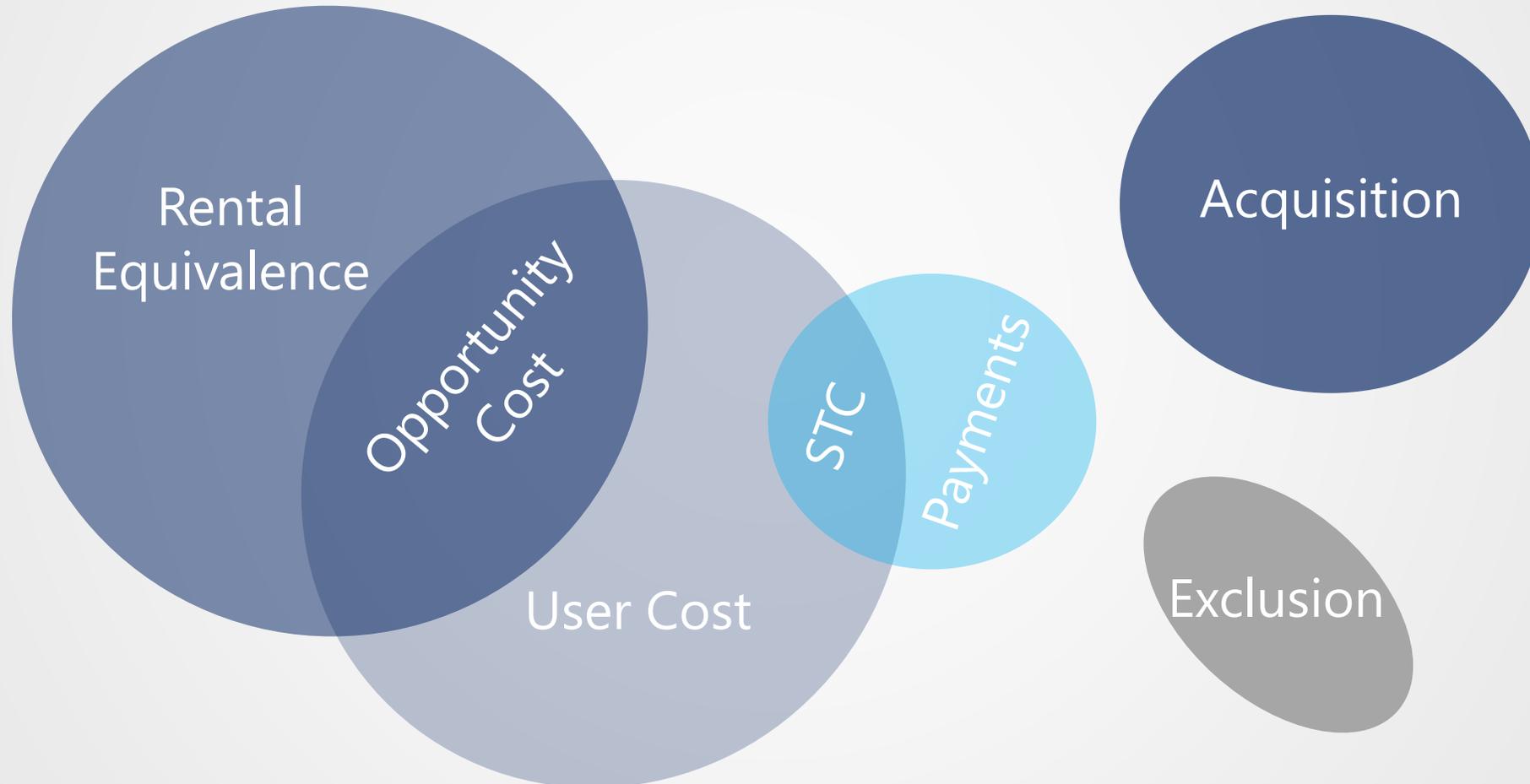


Acquisition of it
(Cost of houses)



Use of it
(Cost of housing)

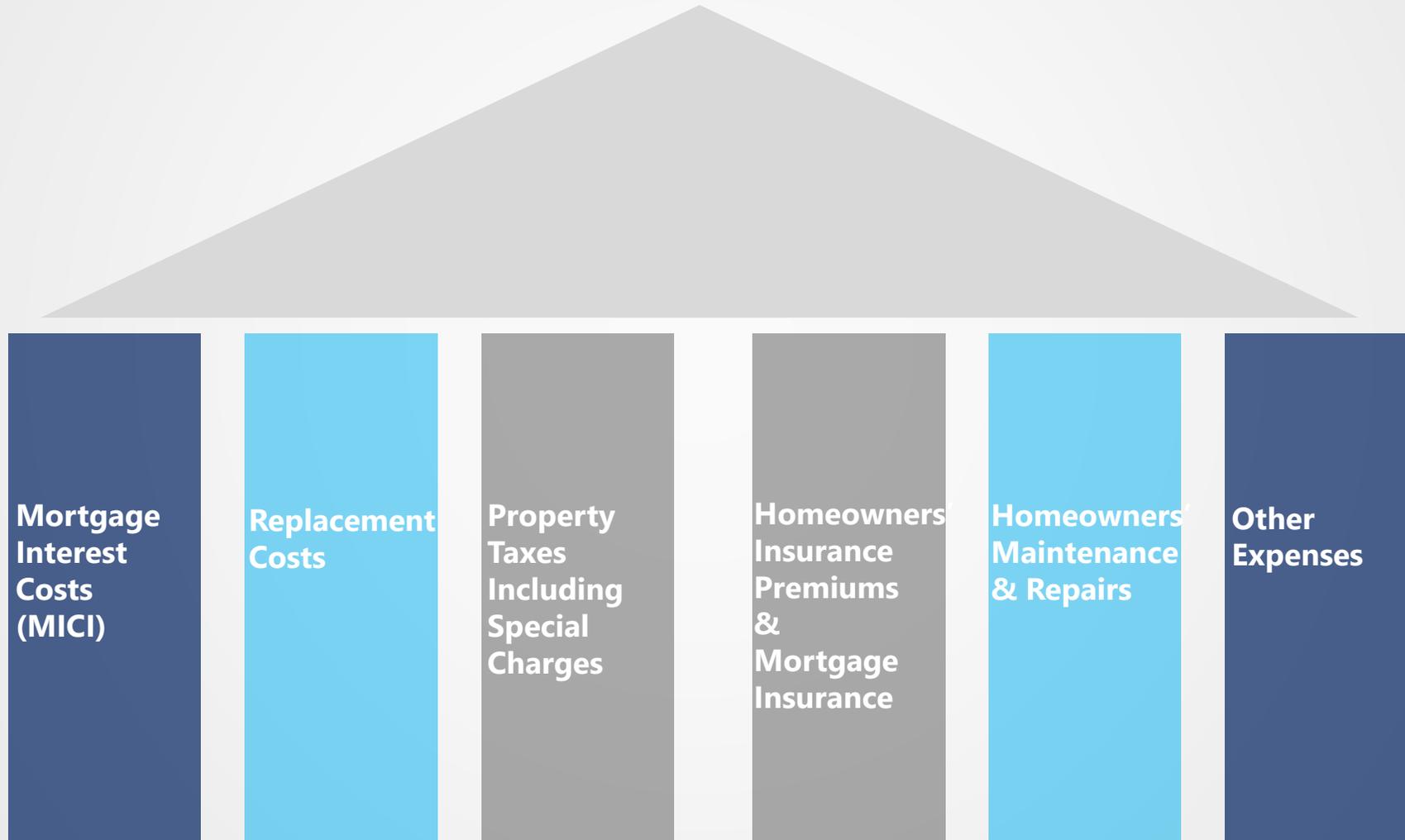
Main treatments of OA in CPI



Statistics Canada OA approach

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

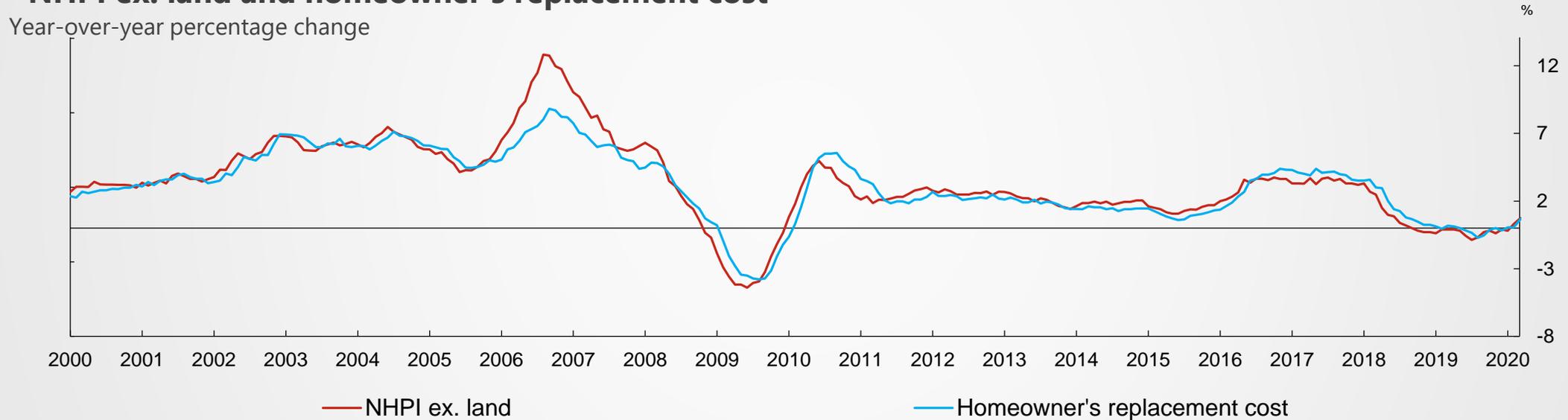
OA components



House prices are included in some components 0A directly

NHPI ex. land and homeowner's replacement cost

Year-over-year percentage change



Sources: Bank of Canada and Statistics Canada calculations

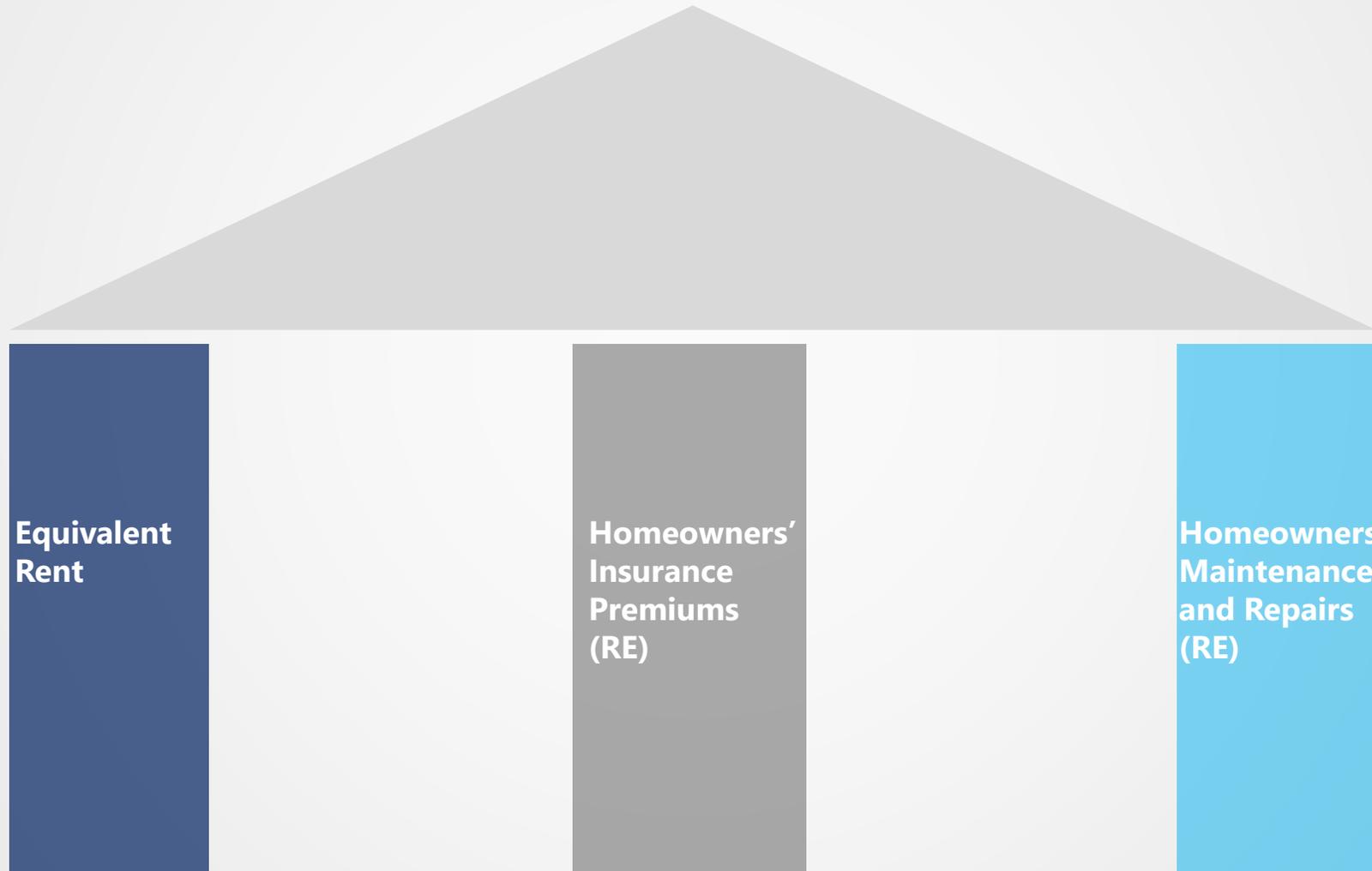
Last observation: April 2020

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

RENTAL EQUIVALENCE

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

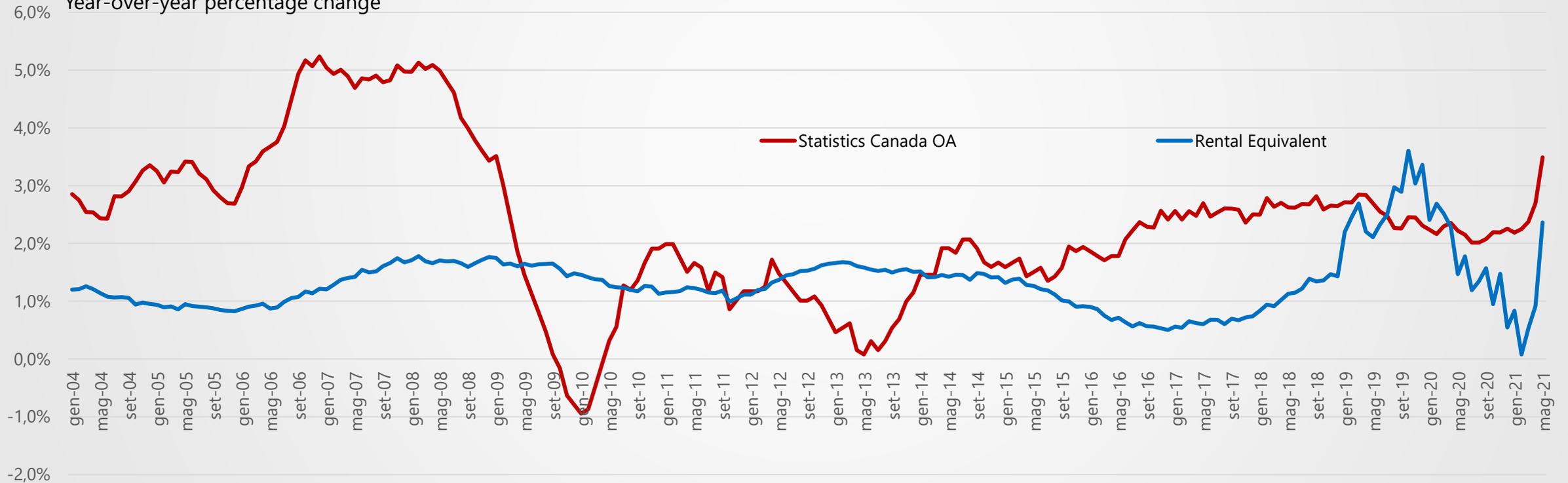
Rental equivalence components



Increased prevalence of rents in CPI leads to weaker inflationary pressures

Owned Accommodation

Year-over-year percentage change



ACQUISITION

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

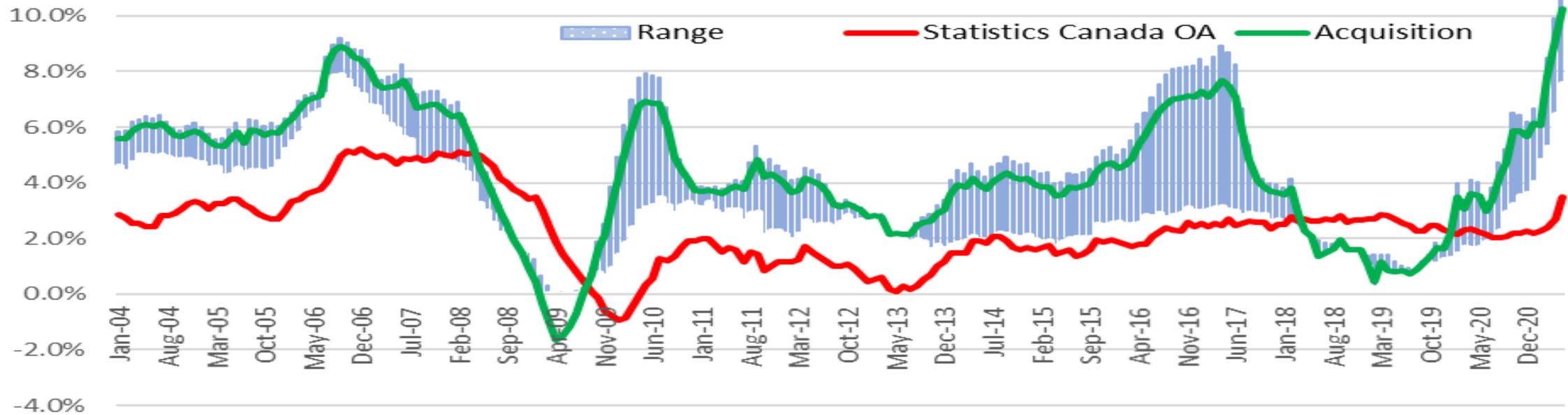
Acquisition components



Increased prevalence of house prices in CPI leads to stronger inflationary pressures

Owned accommodation: various estimates based on the acquisition approach vs official approach

Year-over-year percentage change



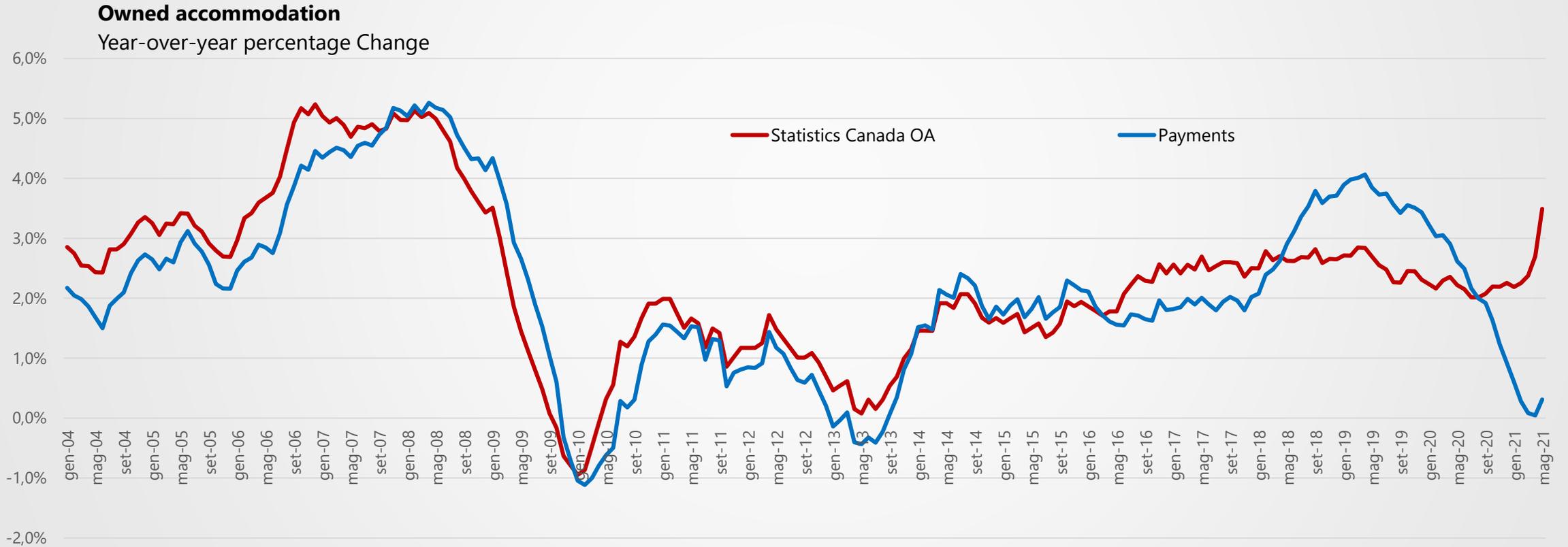
PAYMENTS

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

Payments components



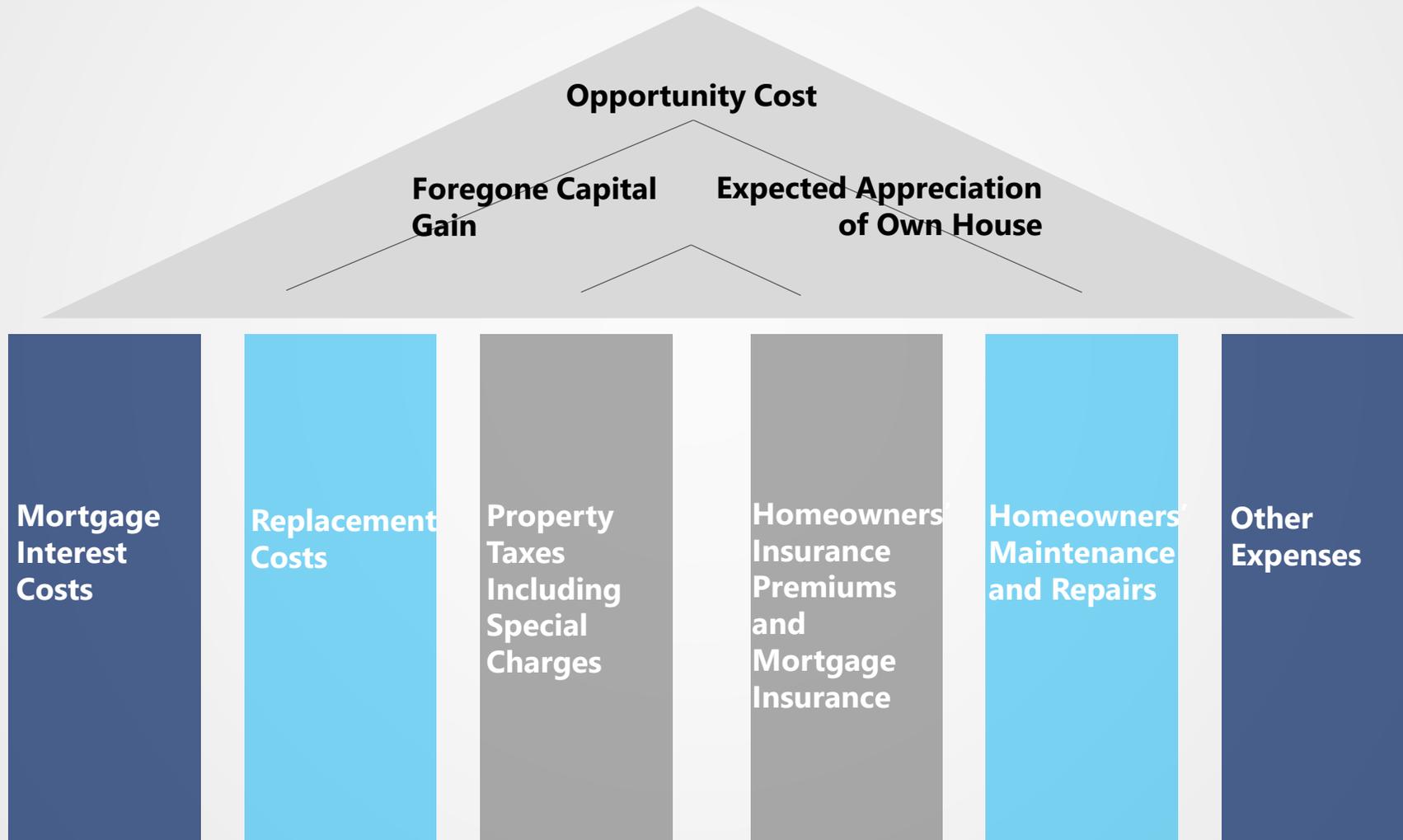
Actual payments by homeowners show similar price pressures to official OA



USER COST

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

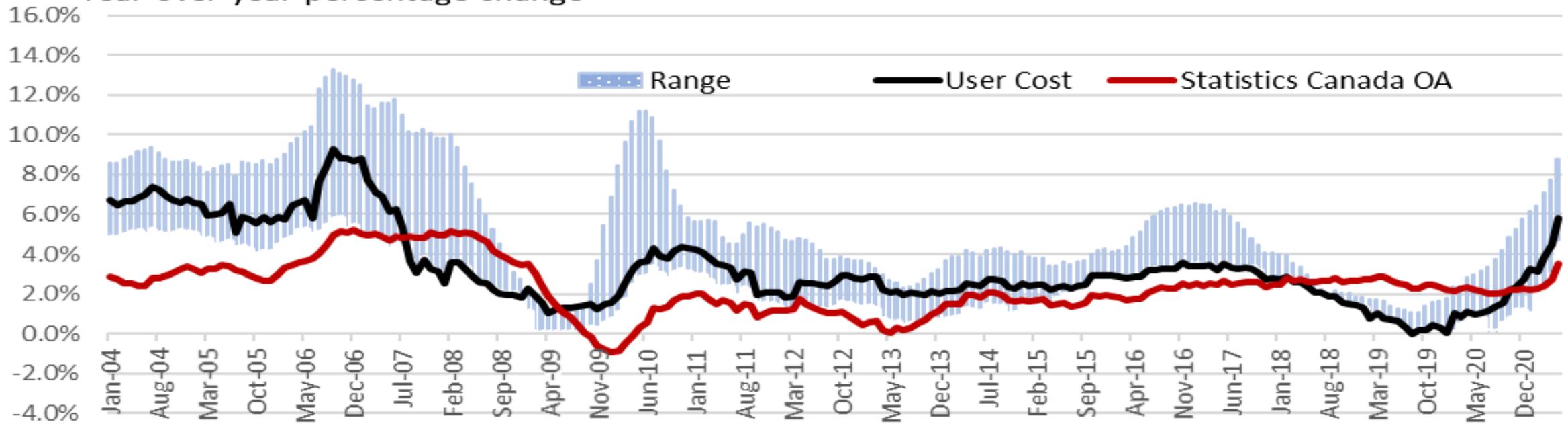
User cost components



User-cost inflation is significantly more volatile than the official measure

Owned accommodation: various estimates of the user cost approach vs. official approach

Year-over-year percentage change



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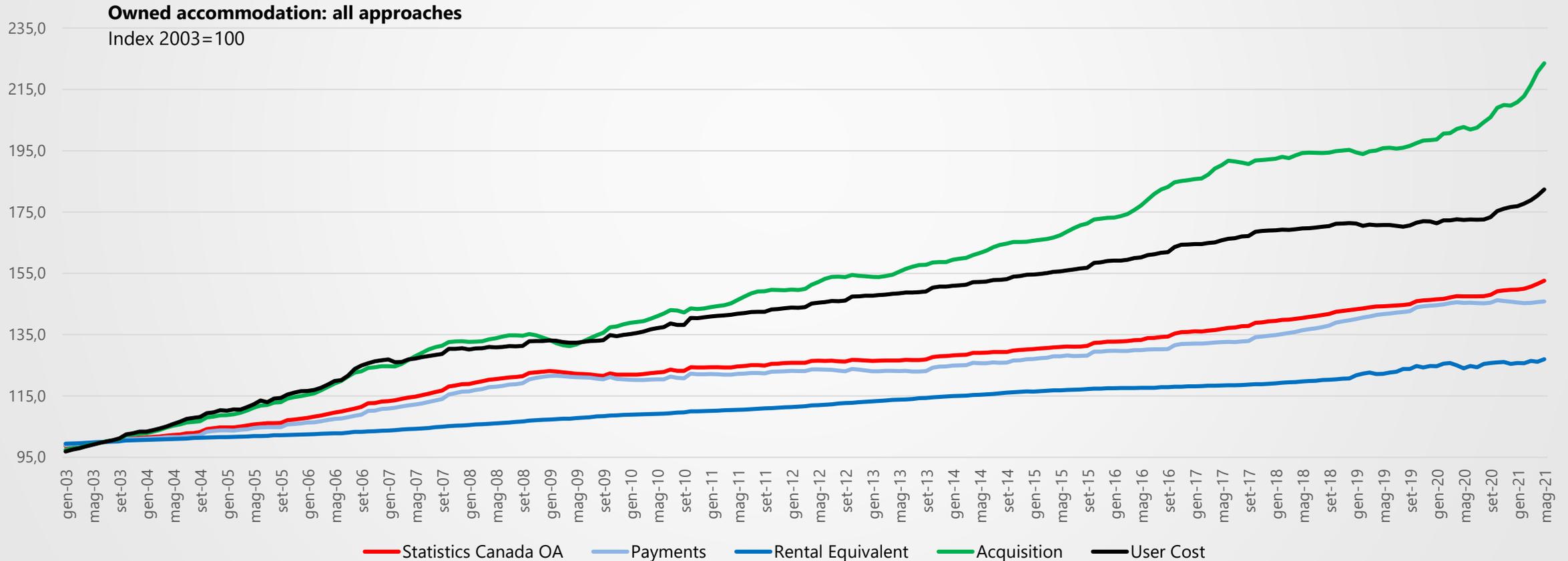
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WHICH APPROACH IS BETTER?

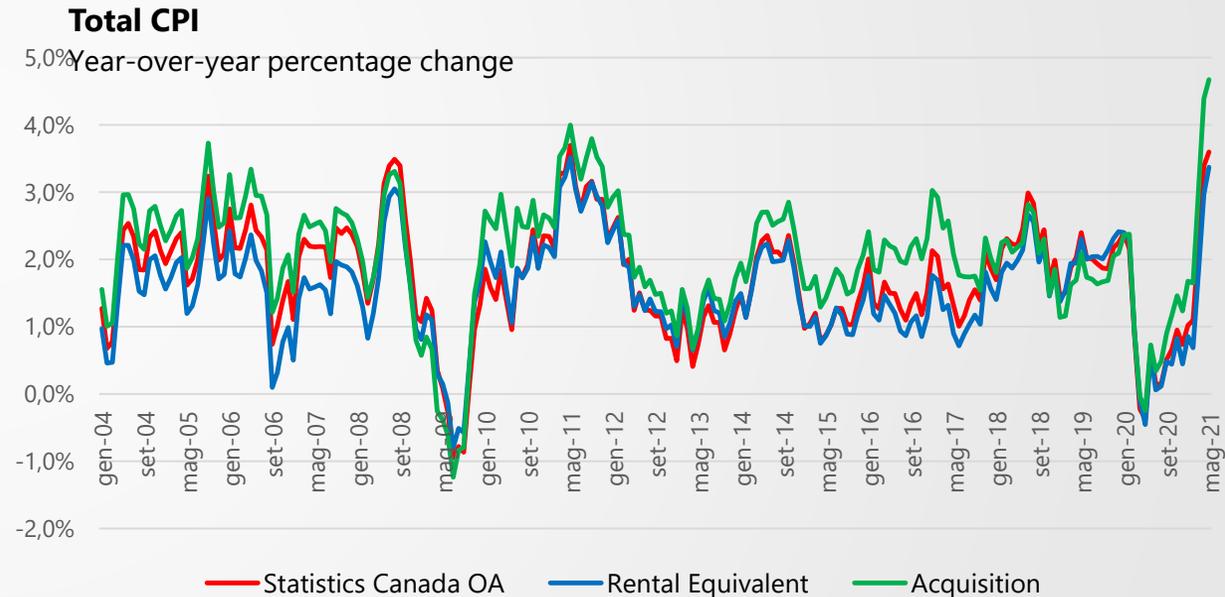
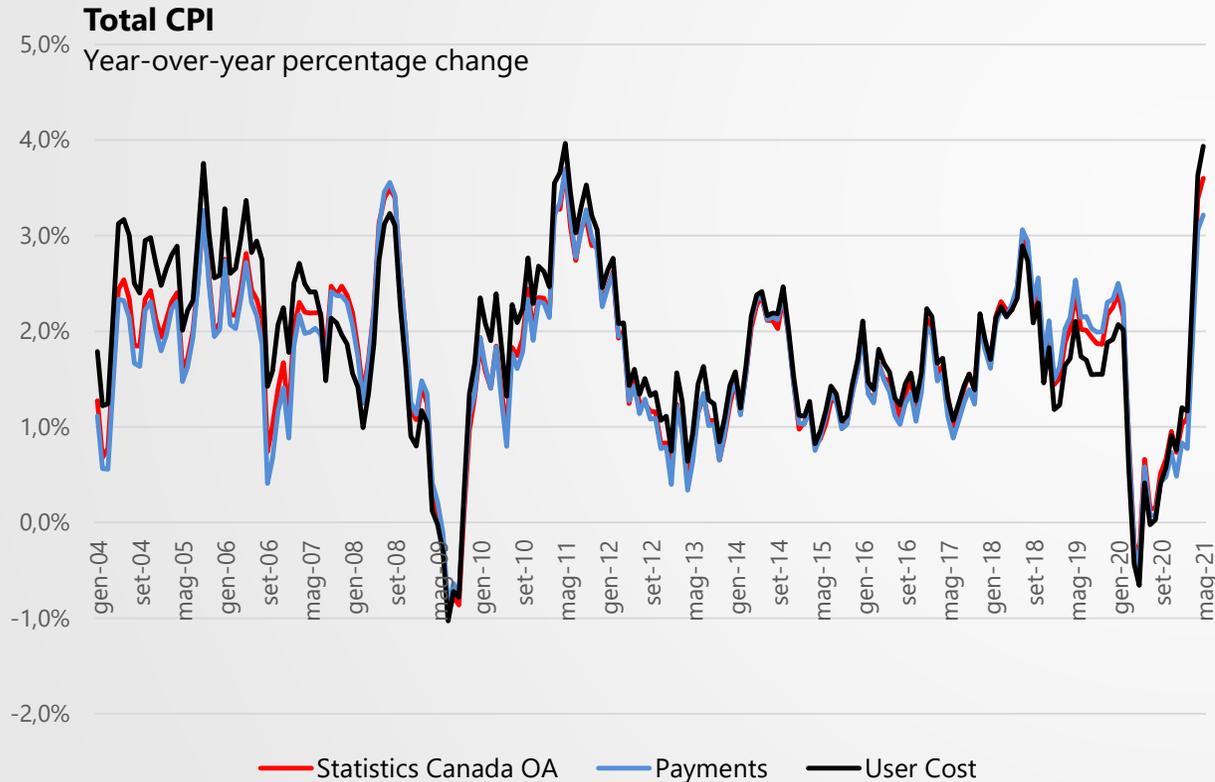
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SUMMARY

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

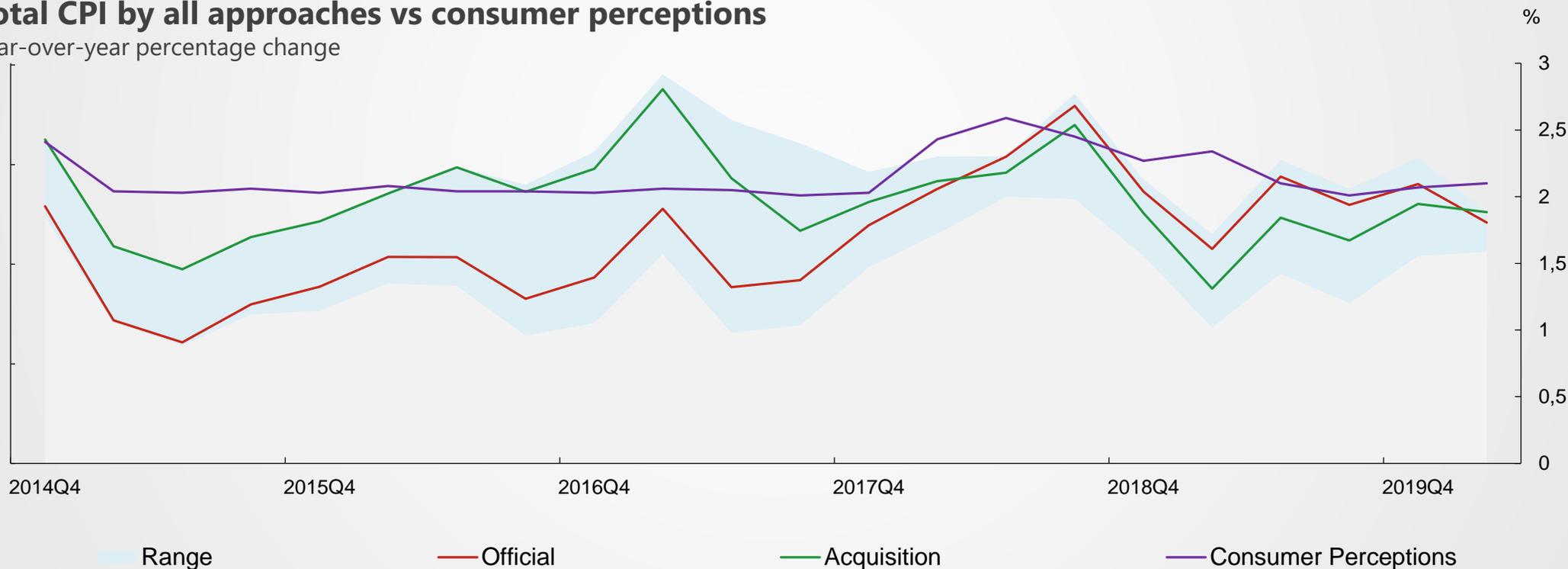
Monetary Policy Perspective

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

	Statistics Canada's Approach	Payments	Acquisition	Rental equivalence	User cost
OA indexes	1.33	1.47	2.25	0.52	2.01
Total CPI	0.83	0.83	0.90	0.76	0.90

Standard deviation of year-over-year growth rates, 2004–20

Summary of evaluation: no clear winner but cost of housing more relevant for CPI

	Target	Practical Considerations	Monetary Policy	
Approaches	Cost of Housing	Data Limitations	Volatility	Perception Gap
Official	+	+	+	-
Rental equivalence	+	-	+	-
Acquisition	-	+	-	+
Payments	-	+	+	-
User cost	+	-	-	-

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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

A low-angle, upward-looking photograph of several modern skyscrapers with glass facades. The buildings are arranged in a way that they appear to converge towards the top of the frame, creating a sense of height and scale. The sky is a clear, bright blue with scattered, light-colored clouds. The glass surfaces of the buildings reflect the sky and each other, creating a complex pattern of light and color. The overall mood is professional and modern.

**THANK YOU
QUESTIONS?**