Accounting for housing wealth in low income statistics for Canada

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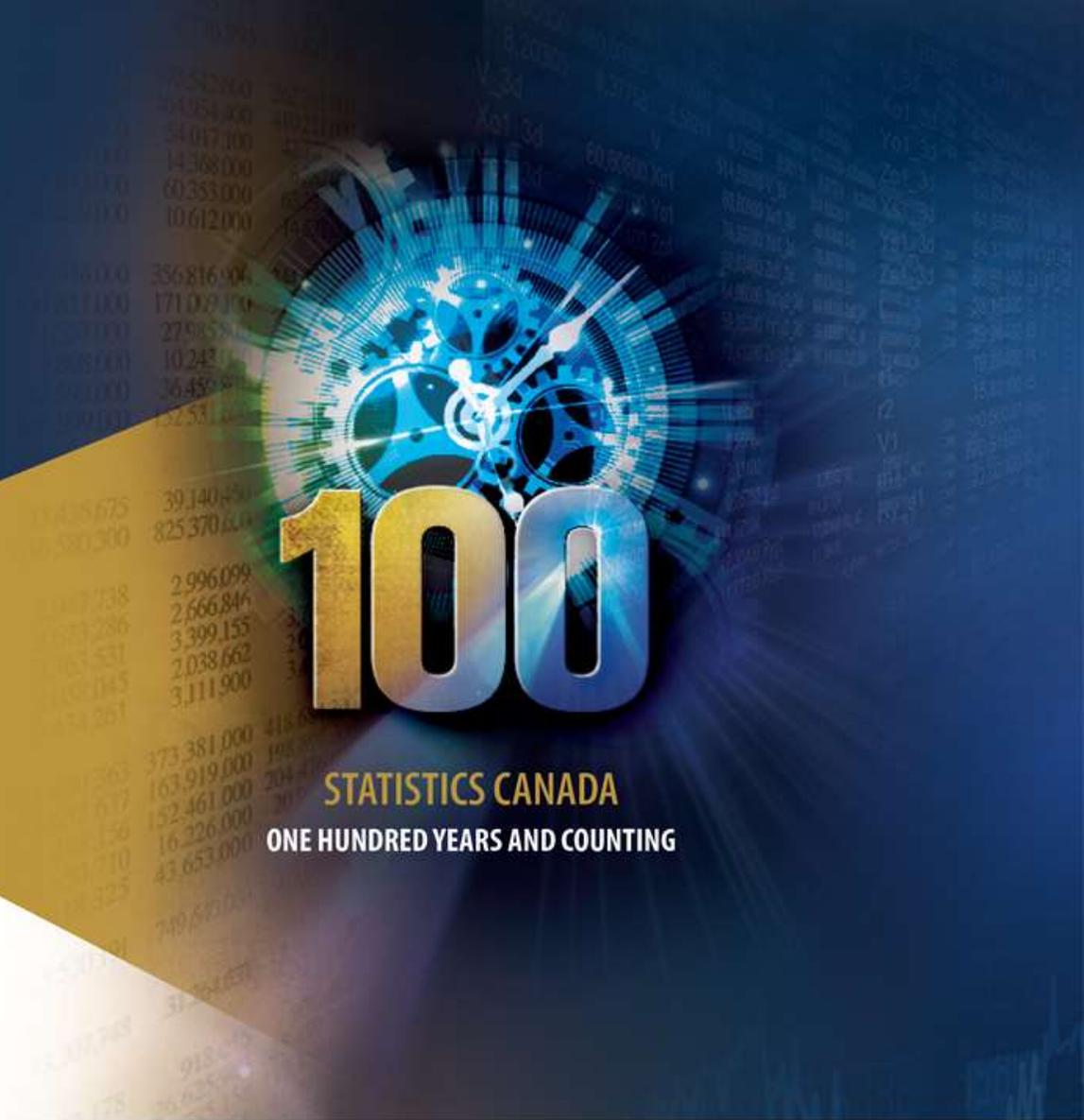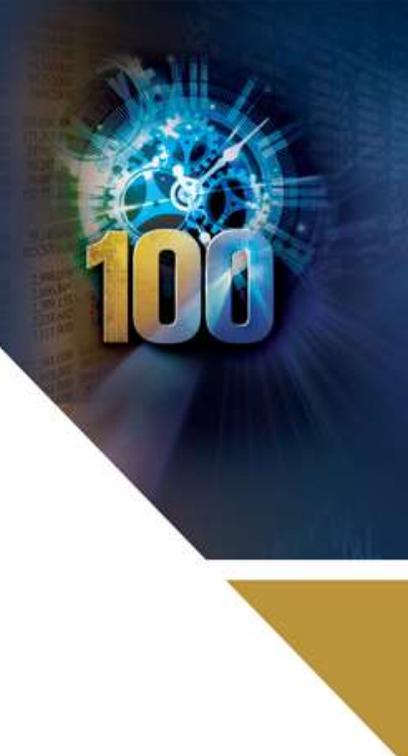
Objectives

- Describe motivations and methods for the valuation of imputed rent (IR) for Canada*

- Presents imputed rent estimates for Canada developed by Statistics Canada for the purpose of creating experimental estimates of the low-income rate in that country, and describe challenges towards developing these estimates

*Estimates presented in this paper are provisional, and subject to revision. They are not intended to be referenced as official statistics.

Statistics Canada   Statistique Canada

Canada

Imputed rent, definition

- Net imputed rent is the estimated value of housing services received by the household, less the shelter costs incurred

- The principle behind imputed rent is that some households, by virtue of being owner-occupiers, receive net benefits from their dwelling that is not received by renters

- Renters in subsidised dwellings also may receive imputed rent

Statistics Canada
Statistique Canada

Canada

Imputed rent, objective of the study

- Present estimates of IR for homeowners with and without mortgages, and renters in subsidised dwellings

- An OECD study of international practices determined that all but 3 out of 27 countries (Canada, Republic of Korea, and United States) calculated imputed rent regularly as part of their income programs
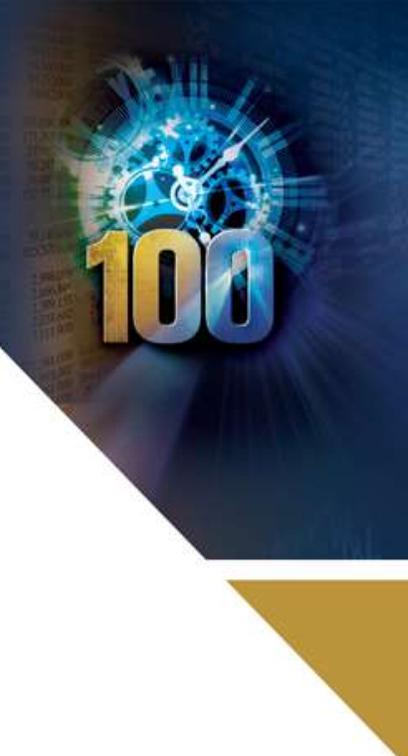
Imputed rent, motivation for studying in Canada

- In a recent major policy announcement, the Government of Canada announced that it will, for the first time ever, be tracking an "official poverty line" for Canada. The official poverty line is to be based upon Canada's Market Basket Measure of low income (Employment and Social Development Canada, 2018).

- The Market Basket Measure is undergoing a "comprehensive review", and imputed rent techniques are being explored as part of the review

- IR for subsidised housing is of particular of interest due to a major new Federal Housing Strategy in Canada

Methods used:

- Hedonic regression
- Selection model
- User cost
- Household income less household costs

Results

Table 1, Distribution of households by tenure type and age of household head, Canada, 2016

tenure type	less than 35	35-49	50-64	65+	all
	age of household head				
renters	52.9	27.5	20.7	22.9	29.4
subsidised renters	2.7	3.5	4.1	4.1	3.7
owners with mortgage	38.4	56.8	39.9	15.4	38.3
owners without mortgage	6.0	12.3	35.3	57.6	28.6

Source: Statistics Canada, Canadian Income Survey, 2016
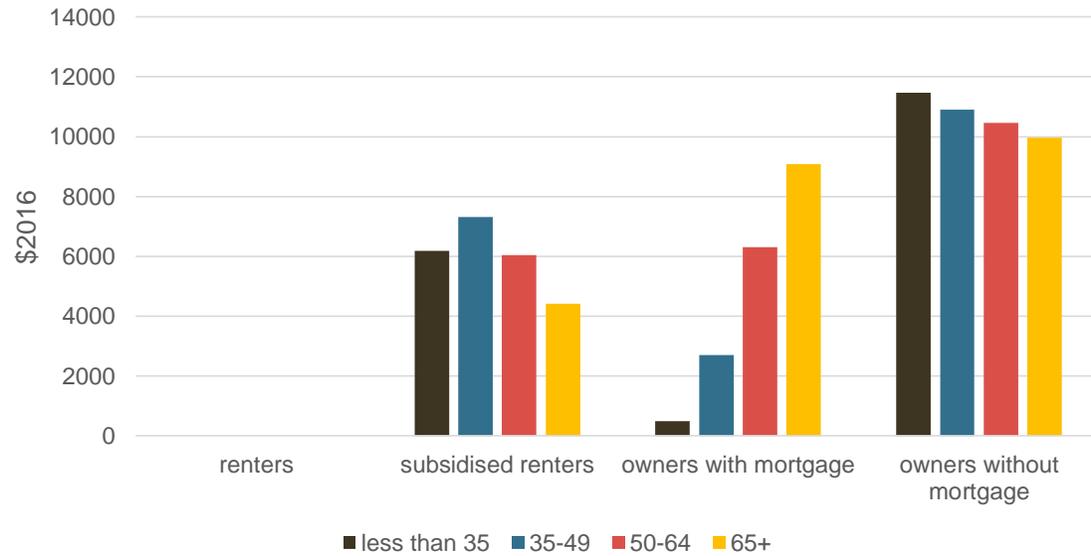
Owners tend to be older, renters younger, therefore accounting for imputed rent will affect the profile of low income across ages

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Hedonic model, IR estimates

Average imputed rent values, Canada, 2016, by age of household head

As expected, owners without mortgage received the highest IR estimates
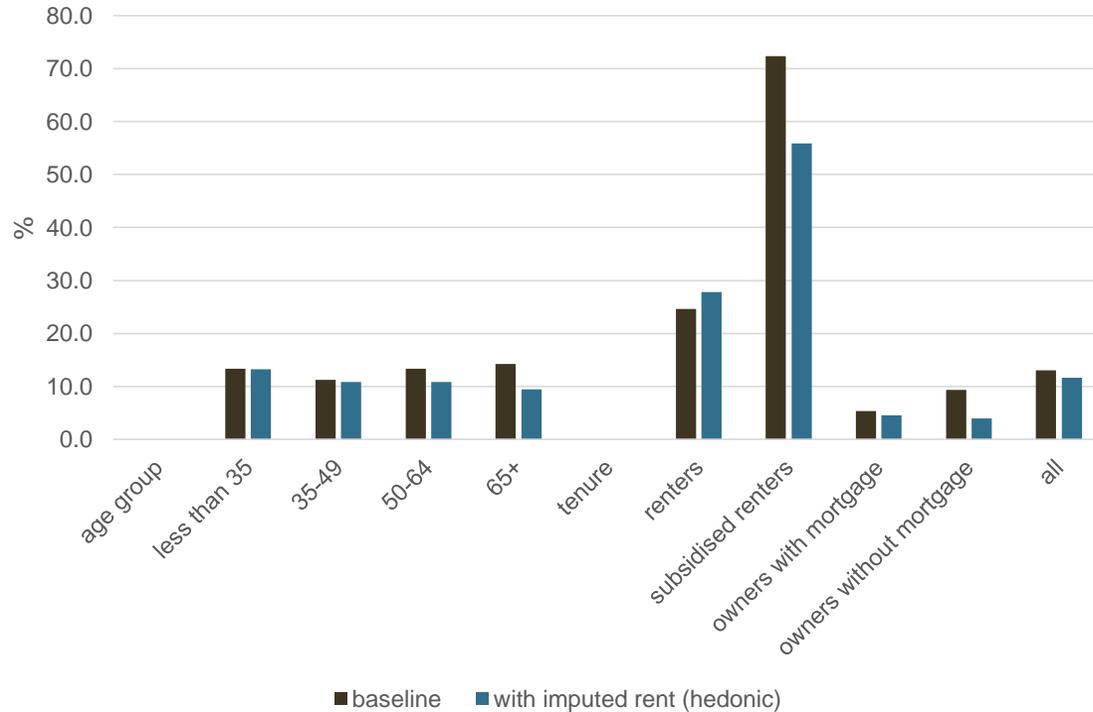
Substantial estimates for other tenure types as well

Source: Calculations using the Canadian Income Survey, 2016

Hedonic model, low income estimates

Low-income rates, by age and tenure type, Canada 2016

Estimates with IR have a different profile of low income across age and tenure types

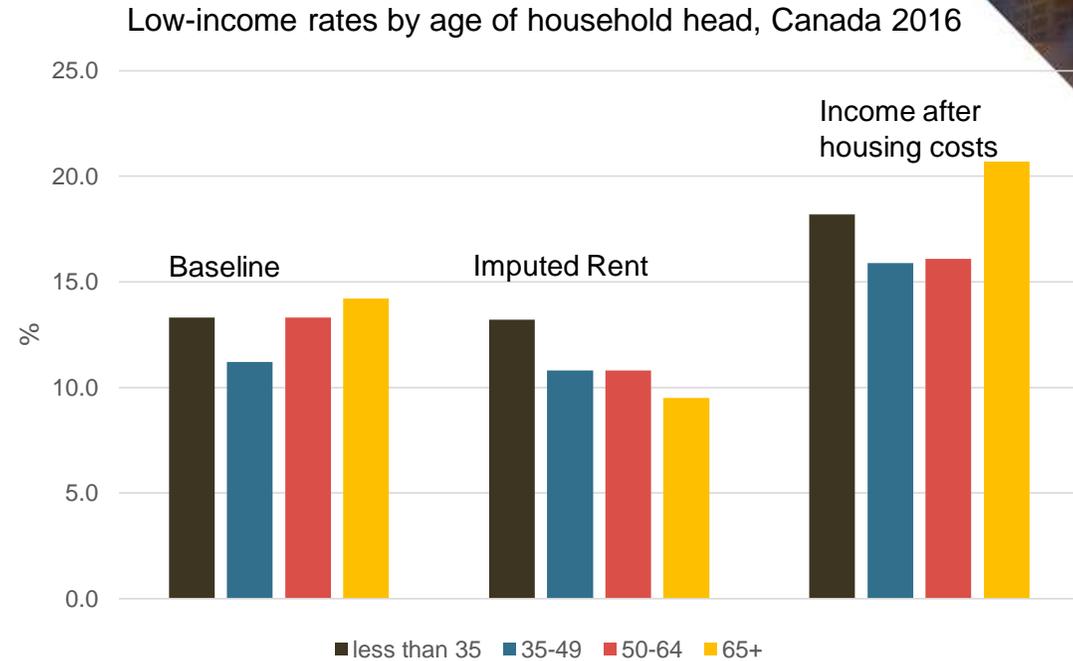Source: Calculations using the Canadian Income Survey, 2016

Other results

- **Heckman method**

  - Controlling for selection did not prove to be very important in this data

- **Unit cost method:**

  - Easy to estimate

  - Challenge is determining the appropriate rate of return

  - Estimated user costs at 2% and 3% rates of return

  - IR estimates were more unequal (lower P10, higher P90)

Other results, continued

- **Income after housing costs:**

  - Intuitive and straight forward to estimate

  - Yields different poverty-age profile from IR approach

Low-income rates by age of household head, Canada 2016

Source: Calculations using the Canadian Income Survey, 2016

Conclusions

- reflection of housing wealth in income can lead to useful insights on well-being, poverty and inequality of the population

- estimates of imputed rent are sensitive to assumptions and approaches.

- standardisation of methods is therefore desirable

- methodologies used in estimation should be clearly described in metadata and made readily available to assist in the interpretation of the results

- should be presented separately from the standard estimates (excluding these considerations) for Canada as they are in other countries

THANK YOU!

**For more information please visit,
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