

Diverging Cost of Living

Causes and Consequences

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Section 1

Introduction

Motivation

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- But this coincided with low inflation
- However, some goods enjoyed high price growth: housing, health
- Was inflation low for everyone? Or were some groups more exposed to high-growth items?

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- Investigate the role monetary policy plays in cost-of-living divergence

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 - ② Identify ultimate drivers (literature mostly focused on divergence along the income distribution)

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 - 1 Construct an alternative housing cost measure
 - 2 Identify ultimate drivers (literature mostly focused on divergence along the income distribution)
 - 3 Consider monetary policy as a driver

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- Monetary policy shocks: Kuttner (2001)

Outline of Presentation

- 1 Introduction
- 2 Group-specific CPIs
- 3 Ultimate Drivers
- 4 The Role of Monetary Policy
- 5 Conclusion

Section 2

Group-specific CPIs

Constructing Group-Specific CPIs

Table: Illustration of group-specific CPI calculations

Item	Item CPI	Weight (both)	Weight (A)	Weight (B)
Food at home	105	0.5	0.4	0.6
Electricity	110	0.2	0.3	0.1
Footwear	97	0.3	0.3	0.3
Group-specific CPI	-	103.6	104.1	103.1

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- Mortgage-based housing cost measure: principal + interest + maintenance + property taxes

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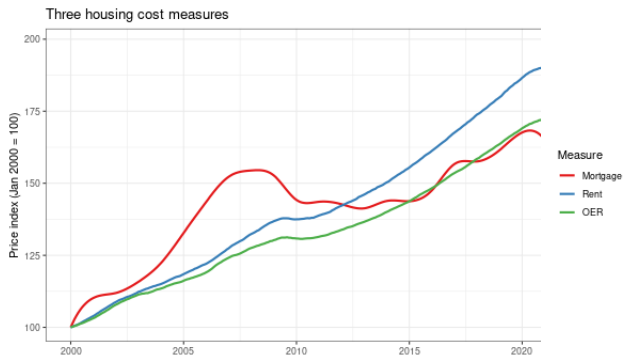
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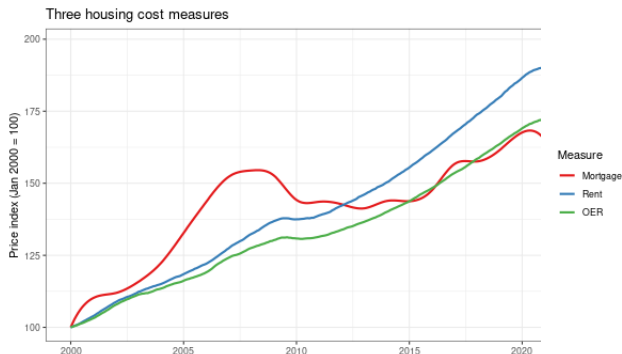
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 - ▶ E.g. $\frac{\partial c_t^H / c_t^R}{\partial g} < 0$ implies higher housing price growth makes owning relatively cheaper
 - ▶ One conclusion of paper: low rates \rightarrow high housing price growth \rightarrow lower $c_t^H / c_t^R \rightarrow$ lower inflation for owners

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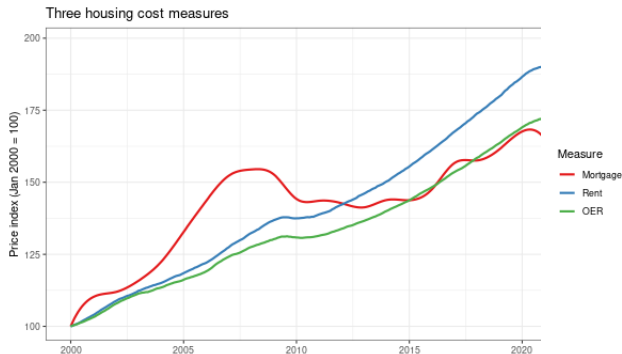
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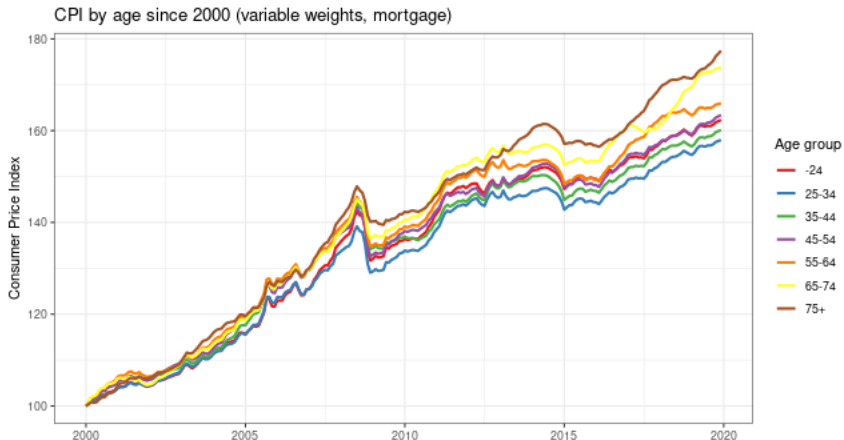
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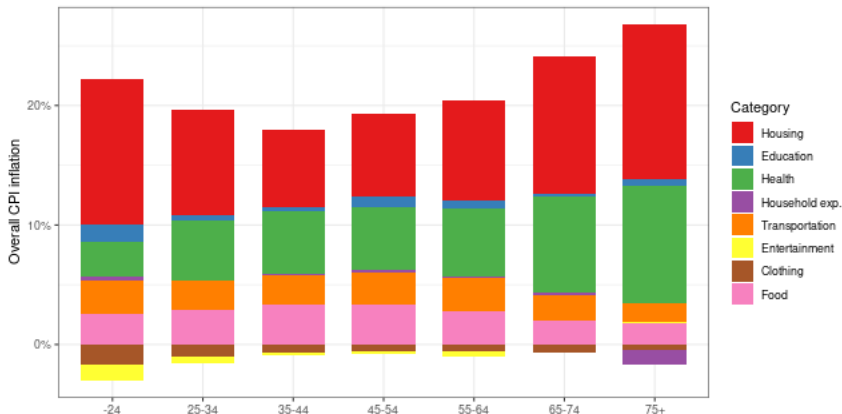
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- 2008-2015: rent cost relatively worse

CPI by Age Group

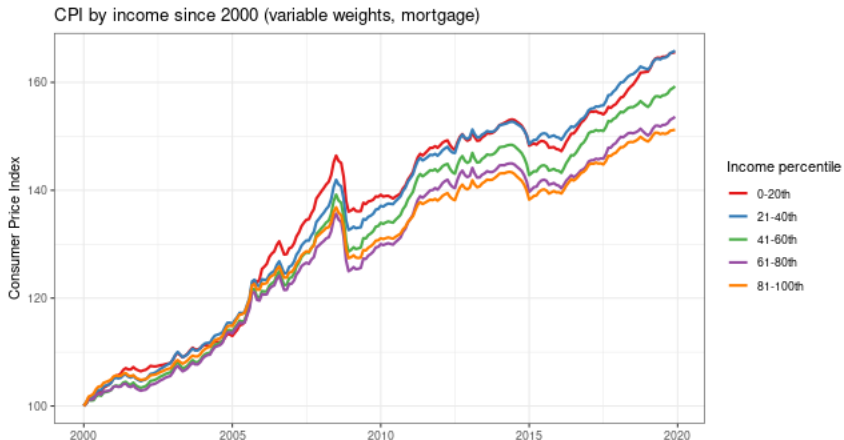


Divergence Drivers by Age Group

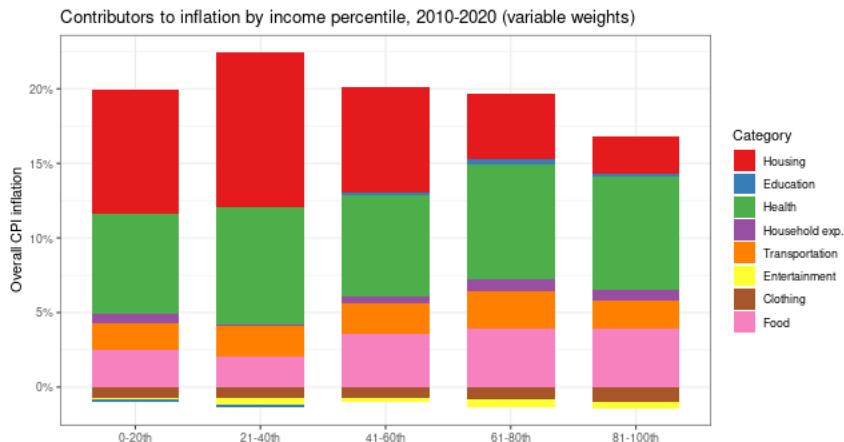
Contributors to inflation by age group, 2010-2020 (variable weights)



CPI by Income Group



Divergence Drivers by Income Group



CPI by Renter/Owner Status

CPI by housing status since 2000 (variable weights, mortgage)



Divergence Drivers by Renter/Owner Status



Section 3

Ultimate Drivers

What Factor Truly Matters?

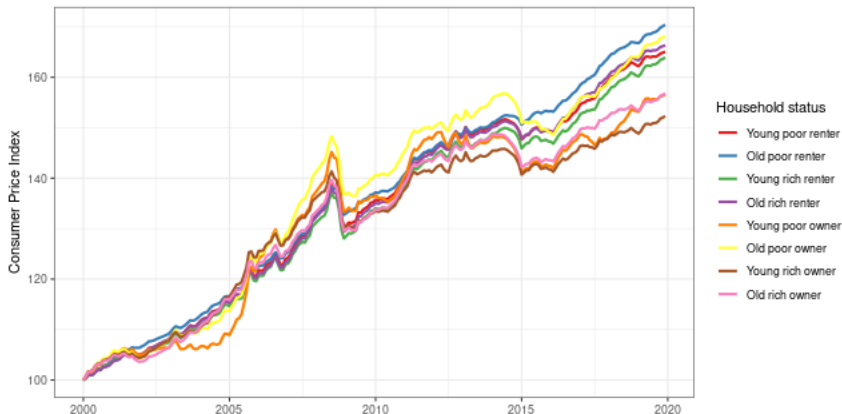
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What Factor Truly Matters?

- Existing studies focusing on divergence by income, but why is this divergence happening?
- Construct age/income/renter categories, e.g. young/rich/owners vs. old/rich/owners to isolate effect of each factor

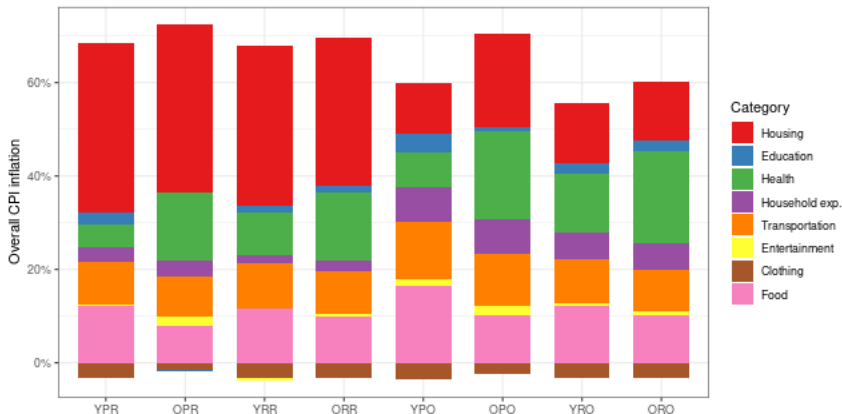
CPI by Age/Income/Housing

CPI by age/income/rent since 2000 (variable weights, mortgage)



Divergence Drivers by A/I/H

Contributors to inflation by household status, 2000-2020 (variable weights)



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- Income mostly matters only through its correlation with housing/age

Section 4

The Role of Monetary Policy

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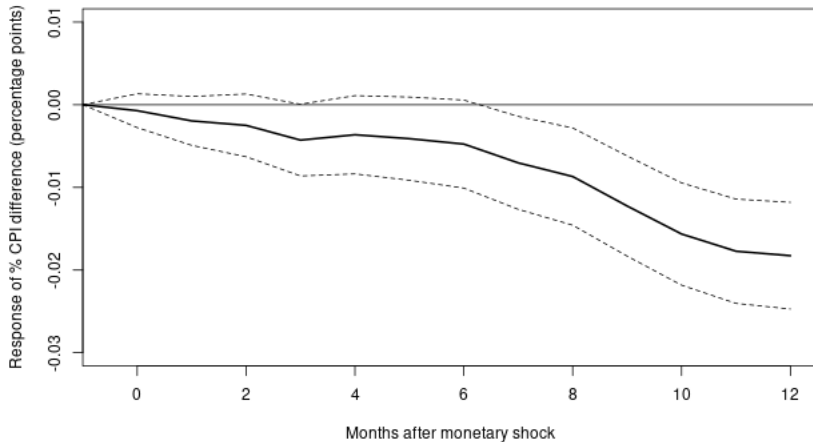
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 - ▶ $\beta_0 + \beta_1 + \beta_2$: cumulative effect two months after impact, etc.

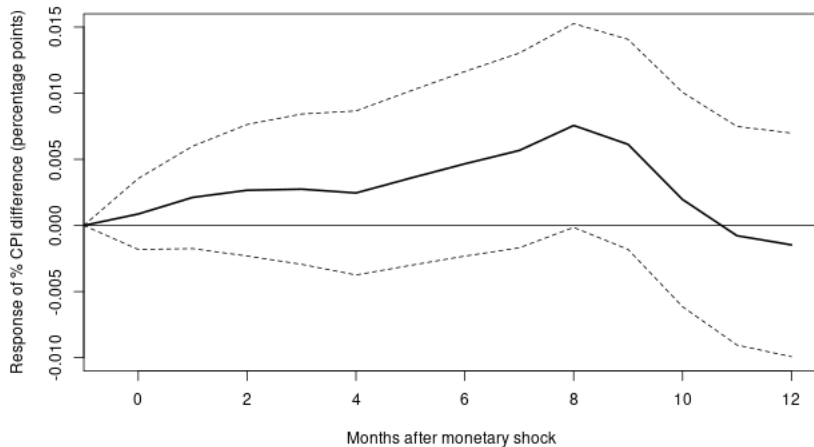
Renter/Owner Divergence

Renters vs. owners (mortgage, variable weights)



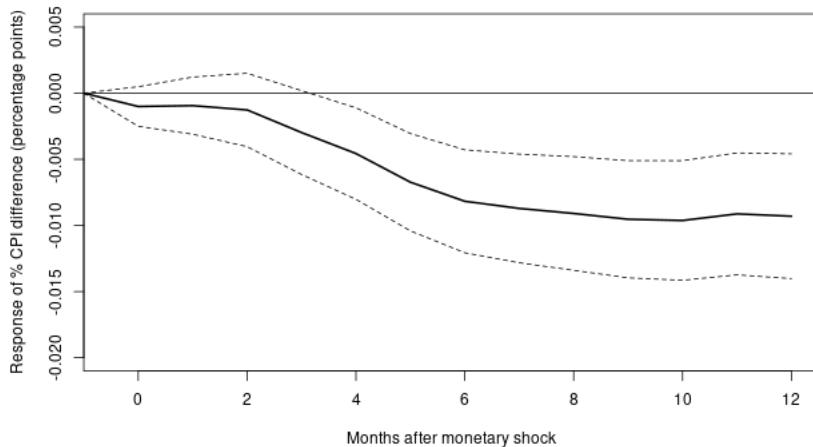
Age Group Divergence

55-64 vs. 25-34-year-olds (mortgage, variable weights)



Income Group Divergence

21-40th vs. 81-100th income (mortgage, variable weights)



Section 5

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 - ▶ Housing: regulations reducing housing supply (Glaeser and Gyourko, 2018), investment demand (Chen et al., 2012)
 - ▶ Health: lack of competition, other issues (Case and Deaton, 2020)