Housing Capital Gains across the Income Distribution

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Discussion by
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This Paper

Research question:

- Do richer households earn higher returns on housing?
- If so, where does the gap come from?

Data:

- Administrative universe of Danish transactions and balance sheets, 1996–2022

Results: annualized unlevered capital gains rise with income

- 90–10 gap: 1.36 pp per year $\approx$ 14.6% over a ten-year holding period
- Location statistically absorbs almost all of it:

$$0.017^{***} \xrightarrow{+\text{ property and buyer controls}} 0.013^{***} \xrightarrow{+\text{ timing} \times \text{postcode}} 0.001$$

Mechanism:

- Financial constraints $\Rightarrow$ affordability sets differ sharply by income
- Two mortgage reforms move prices, not who buys $\Rightarrow$ inelastic supply

My Take

A convincing fact

- Realized, property-level gains linked to the buyer's income for the transaction universe
- Survives a battery of checks: income definitions, geography, renovations, unsold properties

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The result I would advertise more

- Within local markets the gradient turns negative: -0.004^{***} in the capital area
- That kills the simple story that richer buyers select better houses or negotiate better

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My comments

- From property appreciation to household wealth
- From composition nulls to a sharper mechanism test

Comment 1: The Wealth Claim Needs an Equity Measure

The paper closes on implications about wealth inequality

- "Unequal access to high-appreciation markets sustains persistent wealth differences"
- But housing wealth is equity

The appendix already has the equity object

	Base	+Prop.	+Buyers	+Timing	Mun. FE	Post. FE	Timing×Post.
Unlevered appreciation	0.017***	0.017***	0.013***	0.011***	0.005***	0.003***	0.001
Levered equity growth	0.023***	0.029***	0.035***	0.030***	0.019***	0.016***	0.009***

- Levered equity growth: still significant
- The levered sample is a quarter smaller

Comment 1: From Price to Equity to Kroner

$$\underbrace{E_s - E_p}_{\text{equity growth}} = \underbrace{P_s - P_p}_{\text{property appreciation}} + \underbrace{M_p - M_s}_{\text{principal paydown}}$$

Equity growth is closer to wealth, but it is still a rate

- It mixes the price gain with the household's own saving, scaled by leverage
- Wealth accumulates in money, not in rates: a bigger base means a bigger gain

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Three outcomes in one sample with the same specification

- The appreciation rate; equity growth; the gain in money
- Shows which object the location FEs kill, and which keeps a gradient

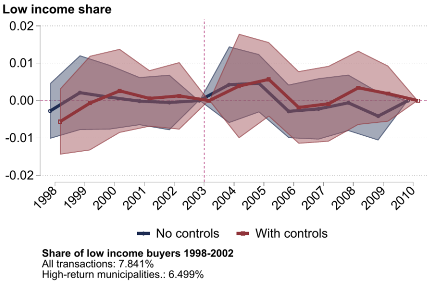
Comment 1: Buyers Are Not the Population

Ownership 48.8% vs. 82.9% → **Initial exposure** Housing at purchase → **Location** Paper's strong result → **Financing** Leverage + paydown

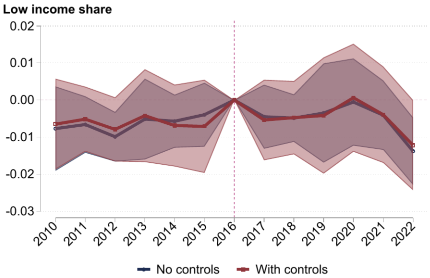
- The paper nails the third margin
- The population wealth interpretation involves all four
- Per household: owns or not; value of the home; local price growth; principal paid off
- Size the four margins against each other
- How much of the housing-wealth gap does location actually deliver?

Comment 2: The Null Is Weaker Than It Looks

2003: interest-only introduction



2016: growth-area guidance



- 2003: on a 6.5% base, report the smallest shift the design could detect
- 2016: the omitted year is the first full year under a national 5% down-payment norm

Comment 2: The Price Designs Select on Price Growth

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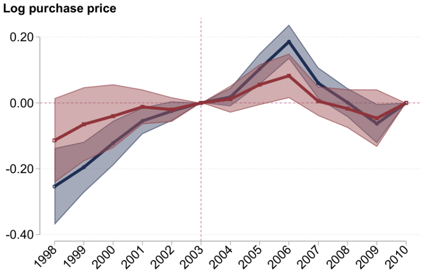

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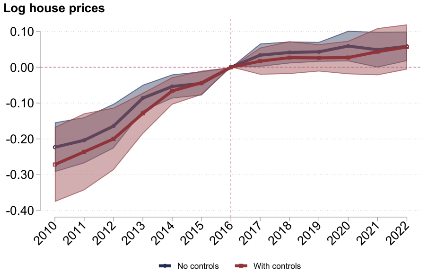

- 2003: treated areas are defined by 1997–2002 price growth, so the pre-trend is built in
- 2016: the guidance was issued because prices were already rising fast there

Comment 2: Make the Treatment Bite on the Constraint

The same two facts have a second explanation

- The reforms changed how much people can borrow, not where they want to live
- If credit does not pick the location, prices still move and composition still does not
- The paper's own list: local ties, information, jobs, commuting, search, tastes

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Test 1: who was payment-constrained before 2003

$$\text{Pred PTI Bound}_i \times \text{HighGrowth}_m \times \text{Post2003}_t$$

- Predicted from pre-reform, pre-purchase variables

Test 2: parental resources, no reform needed

- Do low-income buyers with wealthier parents buy into high-growth areas?
- Control for where the parents live, to separate capacity from preferences

Conclusion

My take

- The central fact is convincing: where you buy accounts for the income gradient
- Not simply the income version of the gender and race return gaps

My suggestions

- Directly measure wealth in equity and in money
- Take the decomposition to the population, not only to buyers
- Separate constraints from preferences