House Price Beliefs and Mortgage Leverage Choice by Bailey Davlia Kuchler Stroebel

Discussion by Christopher Carroll¹

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NBER Behavioral Macroeconomics Workshop, July 14, 2017

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5. What's Not to Like? ...

What Could One Do?

Calibrate 'Epidemiological Expectations' Model with FB Data

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 - Local housing bubbles less likely
 - Your bubble is punctured by your distant friends
 - National bubbles more likely
 - Distant friends can share their bubble with you

Their goal is much more modest

• Use nonrational 'infection' as an exogenous shifter of $\mathbb{E}[\Delta p^h]$

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- See whether people make same choices that would be rational if their ℝ[Δp^h] were rational

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Develop a Model In Which It Would Be Rational
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Optimist: Glass is 30 (or 16) percent full!

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Among type-A people, *some* did buy ...

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What might those reasons be?

Lower Relative Risk Aversion (compared to non-buyers)

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- Among type-A people, *some* did buy ...
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Lower Relative Risk Aversion (compared to non-buyers)

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- A job change …

- Among type-A people, *some* did buy ...
- ... for unobservable reasons

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- Neighbor whose house you covet, died in freak drone accident

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Aa: High RRA

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Subtypes among people with 'buster' friends:

- ► Aa: High RRA
- Ab: Low RRA

Person Ab:

- Won't have much of a 'buffer stock'
- Won't worry as much about bad shocks
 - ceteris paribus, more likely to buy despite 'buster' friends

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Example: Heterogeneous Relative Risk Aversion

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Conclusion: Kind of person more likely to buy (Ab), is kind of person who would have low downpayment *if* they *do* buy

A Classic Heckman (1974) Selection Problem, Right?

b — Available 'balances' that can be used for down payment d — downpayment

You buy if $b + \alpha \mathbb{E}[p^h] + \epsilon > 0$ If you buy, you choose downpayment of

$$d = \gamma b + \omega \mathbb{E}[p^h] + \zeta \tag{1}$$

But authors do not observe *b*. They estimate:

$$d = \check{\omega} \mathbb{E}[p^h] + \eta \tag{2}$$

But then $\check{\omega}$ is biased estimate of ω , because $cov(\eta, \epsilon)$ is nonzero. Problem is generic if \exists any unobserved *b* affecting both purchase decision and downpayment.

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My bias: Finance models imported to household choice always get a lot deeply wrong. Here: No risk aversion ...

 $\mathsf{CLTV} = \eta_0 + \eta_1 \mathsf{Mean}(\Delta \mathsf{Friends} \ p^h) + \eta_2 \mathsf{StdDev}(\Delta \mathsf{Friends} \ p^h)$

Δ Friends p^h	1999-2006	2008-10	
η_1 :Mean	-0.032	-0.278***	
η_2 :StdDev	0.118*	0.639***	

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Judging by my college classmates, Same-College accounts for only a small part of unobserved heterogeneity

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- Advice: Work on More Compelling Topics!