The Gender Gap in Housing Returns

by Goldsmith-Pinkham and Shue

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Summary

1. Single men earn 6 p.p./year higher return on their investment in their primary residence than single women (ROE)
2. Not driven by men taking on more risk (leverage, downside, flipping)
3. Driven by execution: women pay more, list for less, softer w/ discounts
4. => for long holding periods, return gap inconsequential
5. Higher return when same house owned by man than woman
6. Role for preferences/family constraints? Location and timing matter
7. Gap not shrinking over time
Outline

1. Thoughts on Motivation
2. Measurement Error
3. Beliefs
4. Qualitative Evidence
5. Conclusion
1. Motivation

• Initially struggled with this. Descriptive. Curious phenomenon but why so important?
• Answer: wealth gap!
  • First-order for retirement outcomes
• Immediate questions: preferences for risk/housing? Addressable?
• But then useful to have more connection + quantification
  • For example: given holding returns results, how impt is channel?

Figure A2: Wealth at retirement, Survey of Consumer Finances

Note: This figure plots the mean and median net worth across couples, single males and single females near retirement age. Age is defined by the head of the household, as reported in the survey. Single women and single men are defined by gender of head of household, and not living with partner. Couples are defined as those living with partner or married. We pool across all years in the Survey of Consumer Finance (1989-2016).
Descriptive Reporting vs. Interpreting

• Tricky subject to interpret without lazily invoking stereotypes
• Effort to not overinterpret is both sensible and unsatisfying
• But supported by rich literature documenting gender differences
• Could use more discussion of which of these consistent with estimates
• Example: demographics (price level, education, age, race...), location
• Decomposition useful precisely because sharpens contribution to understanding the wealth gap
• Tie to what we might *do* or *think* differently
Should we care about identification here?

• Reverse causality concerns can take the day off... ;-)  
• Many omitted factors correlated with gender  
• But do we want to control for these?  
• Depends on application; motivation helps sharpen this exercise  
  • The “true” gender gap in housing returns is unconditional  
  • Understanding where it comes from requires controls  
• Identification concerns not so much with doubting the unconditional gender gap numbers  
• But in decomposition, some factors more/less interesting
2. Measurement Error

- Crux of paper is inferring gender and single-status from listed names
- Pretty cool to see names in behavioral finance
- Many reasons could get this wrong. Big deal?
- Evidence ME has a big effect?
- If it’s random, does it matter?
A close-to-home example

```
. list sr_date_filing sr_mail_zip sr_buyer sr_seller

| sr_date~g sr_mail~p         sr_buyer          sr_seller          |
|-----------------------------|--------------------------|--------------------------|
| 1. | 20jul2007 91011 PALMER,BRIAN & LISA LABARBERA,JOHN F |

+-----------------------------+--------------------------+--------------------------+

| sr_date~r sa_mail~p         sr_buyer          sr_seller          |
|-----------------------------|--------------------------|--------------------------|
| 1. | 03jan1996 02478 PALMER,LISA C CRITTENDEN,GARY L |
| 2. | 30apr1996 02478 CRAIG,DAVID PALMER,BRIAN L |

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Really more single male homeowners?

- Deeds: single male homeowner 50% more likely than single female (Table 1)
- Census: single female homeowner 50% more likely than single male
Measurement Error Bias with Binary RHS

\[ y = \beta \cdot \text{gender}^* + \varepsilon \]

\[ \text{gender}^* \independent \varepsilon \]

\[ \text{gender} = \text{gender}^* + v \]

\[ \hat{\beta} = \frac{\text{Cov}(g, y)}{\text{Var}(g)} = \frac{\beta (\sigma_{g*}^2 + \sigma_{vg*}) + \sigma_{v\varepsilon}}{\sigma_{g*}^2 + \sigma_v^2 + 2\sigma_{vg*}} \]

\[ \text{gender}^*, \text{gender} \in \{0, 1\} \]

\[ v \in \{-1, 0, 1\} \]

\[ v \not\in \independent (\text{gender}^*, \varepsilon) \]
Ideas to Assess/Address Measurement Error

1. Benchmark with Census data. At city-level, scatter
   
   # single men owner in IPUMS vs. # CoreLogic single-men owner

2. Can also check what predicts deviation in cross-section ($\sigma_{v\varepsilon}$)

3. State-level variation in community property laws where buyers fastidious/not in including both names

4. Simulate to get bounds

3. Beliefs

• Another class of explanations: different beliefs about house prices
• Methodology of Liu and Palmer (2019)

\[ Q_{\hat{r}_{t+1}|\hat{r}_{it}}(\tau) = \beta_0(\tau) + \beta_1(\tau) \cdot \hat{r}_{it} \]

• Designed to assess whether optimists extrapolate more
• If \( \beta_1 \) increasing in \( \tau \) then most optimistic are extrapolating most
• Most optimistic not necessarily buyers: \( \text{Cov} \text{(beliefs, constraints)} > 0 \)
Optimistic Women Extrapolate More

Men

Women

Discussion of Goldsmith-Pinkham & Shue

Christopher Palmer (MIT & NBER)
Optimistic Women More Bullish

\[ Q_{\hat{r}_{t+1}|\hat{r}_{it}}(\tau) = \beta_0(\tau) + \beta_1(\tau) \cdot \hat{r}_{it} \]
4. Qualitative Evidence (Hypothesis Generation)

- Gender gap in expected horizon
- Listing only one name: mortgage qualification or liability issues
  - MDs and JDs particularly likely. Observable variation across zip codes
- Women’s preferences more well defined
  => bid on higher number of houses, search longer
- Women higher standards for inspection stuff
- Trusts more likely to be sellers (check by gender @ purchase?)
- Divorced vs never married different dynamics
- Nonmonotonicity of age effects
Conclusion

• There is definitely a gender-gap in housing returns
• Wealth gap motivation is compelling: quantify and connect
  • Interesting to consider realized performance as asset class
• More interpretation would be useful for framing
• Measurement Error bias assessable and addressable
• Beliefs interesting dimension to explore