Discussion of
"Financial Literacy and Mortgage Equity Withdrawals"

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Why do I like the paper a lot!

- The last sentence of the paper!
- “Nevertheless, designing effective education programs entails dealing with a number of factors (e.g., more intensive lender screening and even cognitive decline over the life-cycle) as stressed by Agarwal, et al. (2009) and Agarwal, et al. (2010).”
- Especially since this sentence was not there in the first but the second draft that Anil send to me.
- This makes my discussion simple.
- This paper is GREAT! I encourage everybody to read it and cite the references therein.

Overview

- The 2007-08 crisis has renewed the policy debate on the role of financial astuteness of consumers on household financial decision making.
- Research suggests that consumers often make what appear to be welfare-reducing decisions.
  - Individuals do not hold a checking account (Hilgert, Hogarth, and Beverly, 2003)
  - Accept payday loans with astronomical APRs even in the presence of other, cheaper, credit sources (Agarwal, Skiba, and Tobacman, 2009)
  - Agarwal and Mazumder (2010) explicitly link financial mistakes to cognitive abilities. Especially math abilities.
- The authors contribute to this growing literature by studying the answers to financial literacy questions and the consumers choice to withdraw home equity from their homes.
- The authors find that after controlling for the observables, mortgage equity withdrawal is linked to the financial illiteracy of the borrower.

Data

- The authors use the Health and Retirement Survey(HRS) dataset:

  Strength
  - Panel data.
  - They add three financial literacy questions to the HRS survey.
    - Portfolio Diversification, Compounding, and money illiusion
  - They have a measure of the HEW.

  Drawbacks
  - The samples is restricted to heads of household age above 50.
  - A lot of people could have used Home Equity (loans and lines) to withdraw equity. I think they do not observe these borrowers.

Results

- Refinance incentive is a key driver of HEW
  - Not intuitive. I would have thought that some body who wants to withdraw home equity, should not be very concerned with the interest rates.
- Home price appreciation is also a big driver of HEW
- Age of the household head is negatively related to HEW
- Head of the household is white is also negatively related to HEW
- Finally, they find that the question about portfolio diversification is important to HEW
- For most part, the results survive if they include risk, income and wealth controls and year and state fixed effects.

Comments

- I have three comments about the paper.
  - Why do people withdraw home equity? Should people who understand diversification withdraw more or less home equity?
  - Sample selection
    - HRS sample is 50+yrs.
    - People can also withdraw through home equity loans and lines.
  - The financial literacy survey question design. Why these three measures of financial literacy?

Why do people withdraw home equity?

- Provides financial flexibility (Agarwal, Ambrose, & Liu 2006)
  - HELOC utilization is lower for borrowers with expectations of future credit shocks
  - HELOC utilization is correlated with changes in borrower credit quality
- Equity extraction
  - Repay debt and home improvements
    - Canner et al (2002); Disney & Gathergood (2009)
  - Finance current consumption
    - Benjamin & Chinloy (2008); Hurst & Stafford (2004); Kennedy & Greenspan (2007); Agarwal (2007); Mian & Sufi (2009)

Why do people withdraw home equity?

- It is not obvious to me that people who know about portfolio diversification should not withdraw home equity.

- I could argue that people who know about portfolio diversification are more likely to withdraw home equity and invest in stocks or bonds or cash, precisely because they know about diversification.

- One could think of examples where financial literacy might be important. For example, one needs to understand a complex option value formula to solve for the optimal mortgage refi problem. Hence, it would not be surprising to me that people who are good at math, on average, do better at optimally refinancing their mortgage.

- But in their context, it is not obvious to me that even AFQT scores (measures of math, numeracy, and verbal skill) should be correlated to HEW.

- Maybe, the authors need a model to motivate their results.

Sample selection : HRS sample is 50+yrs

- Assuming that the authors model HEW and diversification.
- Are the results representative for the entire age distribution.
- Maybe, 50+ year old cohorts who did not do portfolio diversification are more likely to withdraw home equity.
- The younger cohorts are better at portfolio diversification and hence less likely to withdraw home equity.
- While, they cannot look at the behavior of the younger cohorts. But, even among the older cohorts, they could interact the portfolio diversification dummy with 10 year age cohort dummies. Maybe the effect is more pronounced among the oldest cohorts.
- Even then, why are 80 year olds withdrawing equity?

Sample selection: People withdraw through home equity loans and lines

- Prior research shows that home equity line borrowers have
  - (i) more expensive homes ; (ii) higher income; (iii) more equity
    - Savage (1995), Canner, Durkin & Luckett (1998), Cavanaugh (2000): Survey of Consumers Manchester & Poterba (1989): Survey of Income & Program Participation
- Who are the people who refinance a mortgage to withdraw home equity? Refinancing a mortgage to withdraw equity is more expensive. Taking a home equity loan or line is free (or at least less costly).
- Maybe, this is a higher order question.
- Maybe, people who take out home equity loans/lines are also better at portfolio diversification and compounding.

The financial literacy survey question design

- It would be helpful to know the exact questions and the answer choices.
- From the paper, it is unclear if the respondents had multiple choices. If not, then this would pose a problem. If yes, then should a “no answer” or “I do not know” always be the same as a “wrong answer”. Maybe the question was confusing.
- How do these responses compare to other survey evidence – Lusardi and Mitchell (2007); Agarwal et. al. (2011).
- Maybe, we should ask the people why they are cashing out home equity.

Other Comments

- The sign on the money illusion question is positive where as it is negative on the compounding and portfolio diversification questions.
- Moreover, the sign on the compounding question is not robust across specifications.
- While, the coefficients on the compounding and money illusion questions are statistically insignificant, but the magnitudes are not zero. Hence, if this is a issue of the power of the test, then the flipping of the sign is worrisome.
- I would like to see the marginal effects to understand how important are these effects.
- Why not model HEW as a continuous variable. Why treat a HEW of $1 to $10000 equally.

Conclusion

- The role of financial literacy in household financial decision making is a very important topic.
  - Significant policy implications
    - The Card Act
    - Consumer Financial Protection Bureau
- The results are preliminary, I would love to read the next draft.