Discussion of
Reverse Mortgages:
What Homeowners (Don’t) Know and How it Matters
by T. Davidoff, P. Gerhard, and T. Post

Stefan Nagel
University of Michigan, NBER, CEPR
August 2015
Reverse mortgages (RM) seem useful for many cash-poor, home-equity-rich households.
Reverse mortgages (RM) seem useful for many cash-poor, home-equity-rich households

Yet, RM market remained very small
- Despite government support (mortgage insurance, etc.)

Shared appreciation mortgages (SAMs)
Continuous workout mortgages
Housing futures, options, swaps
GDP linked bonds
Financial innovation and reality

- Reverse mortgages (RM) seem useful for many cash-poor, home-equity-rich households
- Yet, RM market remained very small
  - Despite government support (mortgage insurance, etc.)
- Joins list of other seemingly useful financial innovations that struggled in the marketplace (Shiller 2013)
  - Shared appreciation mortgages (SAMs)
  - Continuous workout mortgages
  - Housing futures, options, swaps
  - GDP linked bonds
Reverse mortgages (RM) seem useful for many cash-poor, home-equity-rich households
Yet, RM market remained very small
  - Despite government support (mortgage insurance, etc.)
Joins list of other seemingly useful financial innovations that struggled in the marketplace (Shiller 2013)
  - Shared appreciation mortgages (SAMs)
  - Continuous workout mortgages
  - Housing futures, options, swaps
  - GDP linked bonds
Is there a market failure?
Reasons for lack of take up

- Technical hurdles
  - Legal, tax, ...

Stefan Nagel
Reverse Mortgages
Reasons for lack of take up

- Technical hurdles
  - Legal, tax, ...

- Paternalistic view: Households need to be educated/convinced that they should take out reverse mortgages
  - Behavioral biases: people misperceive costs and benefits? Lack of attention?
  - Rule of thumb behavior: Consume income (=housing service flow), not principal (=home equity) as in case of “income”-generating mutual funds, stocks with dividends, etc.
  - Lack of product knowledge? (Focus of this paper)
Reasons for lack of take up

- Technical hurdles
  - Legal, tax, ...

- Paternalistic view: Households need to be educated/convincing that they should take out reverse mortgages
  - Behavioral biases: people misperceive costs and benefits? Lack of attention?
  - Rule of thumb behavior: Consume income (=housing service flow), not principal (=home equity) as in case of “income”-generating mutual funds, stocks with dividends, etc.
  - Lack of product knowledge? (Focus of this paper)

- Alternatively: Do economists use the wrong model and misunderstand costs/benefits?
Possible disadvantages of reverse mortgages

- Moral hazard. How much of it is priced into RM rates?
  - Lack of incentives for house maintenance
  - Lack of incentives for relatives/court to sell house at good price

Possibly bad interaction with long-term care needs and health problems at old age (Caplin 2000)

RM becomes due upon move

Consuming out of home equity has depleted equity buffer: insufficient funds to pay for long-term care

Lengthy but temporary out-of-home medical stay: lender has right to force sale of the house

Probabilities of this happening may be small – but aversion to these risks could be high

Example: Nakajima and Telyukova (2014) find, in calibrated life-cycle model, that bequest motives, medical expense and nursing home moving risk, transaction costs go a long way in explaining lack of RM demand.
Possible disadvantages of reverse mortgages

- Moral hazard. How much of it is priced into RM rates?
  - Lack of incentives for house maintenance
  - Lack of incentives for relatives/court to sell house at good price
- Possibly bad interaction with long-term care needs and health problems at old age (Caplin 2000)
  - RM becomes due upon move
  - Consuming out of home equity has depleted equity buffer: insufficient funds to pay for long-term care
  - Lengthy but temporary out-of-home medical stay: lender has right to force sale of the house
  - Probabilities of this happening may be small – but aversion to these risks could be high
Possible disadvantages of reverse mortgages

- Moral hazard. How much of it is priced into RM rates?
  - Lack of incentives for house maintenance
  - Lack of incentives for relatives/court to sell house at good price
- Possibly bad interaction with long-term care needs and health problems at old age (Caplin 2000)
  - RM becomes due upon move
  - Consuming out of home equity has depleted equity buffer: insufficient funds to pay for long-term care
  - Lengthy but temporary out-of-home medical stay: lender has right to force sale of the house
  - Probabilities of this happening may be small – but aversion to these risks could be high
- Example: Nakajima and Telyukova (2014) find, in calibrated life-cycle model, that
  - bequest motives
  - medical expense and nursing home moving risk
  - transaction costs
  go a long way in explaining lack of RM demand.
Main findings

- WTA = willingness-to-accept RM
Main findings

- WTA = willingness-to-accept RM
- WTA positively related to
  - product knowledge
  - knowing other people that have RM
  - risk tolerance
  - HH characteristics suggesting benefit from RM (e.g., low income)

Information treatment: no significant effect on WTA
Main findings

- **WTA** = willingness-to-accept RM
- WTA positively related to
  - product knowledge
  - knowing other people that have RM
  - risk tolerance
  - HH characteristics suggesting benefit from RM (e.g., low income)
- ... but product knowledge unrelated to these HH characteristics
Main findings

- \( WTA = \text{willingness-to-accept RM} \)
- \( WTA \) positively related to
  - product knowledge
  - knowing other people that have RM
  - risk tolerance
  - HH characteristics suggesting benefit from RM (e.g., low income)
- ... but product knowledge unrelated to these HH characteristics
- Information treatment: no significant effect on WTA
Do households have specific RM knowledge *because* they need/are interested in RM?
Do households have specific RM knowledge *because* they need/are interested in RM?

Household with characteristics \( x \) (e.g., low income) and unobserved characteristics \( u \) associated with interest/need for RM
Do households have specific RM knowledge \textit{because} they need/are interested in RM?

Household with characteristics \(x\) (e.g., low income) and \textit{unobserved characteristics} \(u\) associated with interest/need for RM

Specific knowledge

\[ k = \alpha_0 + \alpha_1 x + u + \epsilon \]
Comments 1: Reverse causality problem

- Do households have specific RM knowledge because they need/are interested in RM?
- Household with characteristics \( x \) (e.g., low income) and unobserved characteristics \( u \) associated with interest/need for RM
- Specific knowledge

\[
k = \alpha_0 + \alpha_1 x + u + \epsilon
\]

- RM take-up

\[
m = \beta_0 + \beta_1 x + \beta_2 k + \gamma u + \xi
\]

and upward bias on \( \beta_2 \) because \( \text{Cov}(k, u) > 0 \).
Do households have specific RM knowledge *because* they need/are interested in RM?

Household with characteristics $x$ (e.g., low income) and *unobserved characteristics* $u$ associated with interest/need for RM

Specific knowledge

$$k = \alpha_0 + \alpha_1 x + u + \epsilon$$

RM take-up

$$m = \beta_0 + \beta_1 x + \beta_2 k + \gamma u + \xi$$

and upward bias on $\beta_2$ because $\text{Cov}(k, u) > 0$.

Peers variable might proxy for $u$: If I have positive $u$, my neighbors and friends might have positive $u$, too.
Positive relationship between risk tolerance and WTA viewed as indicating misperceived risks.
Positive relationship between risk tolerance and WTA viewed as indicating misperceived risks.

But: Risk of RM becoming due (and home equity depleted) when forced to move to long-term care facility could be a deterrent for a rational risk averse individual.
Positive relationship between risk tolerance and WTA viewed as indicating misperceived risks.

But: Risk of RM becoming due (and home equity depleted) when forced to move to long-term care facility could be a deterrent for a rational risk averse individual.

Other uncertainties: tax treatment of RM, size of bequest.
Positive relationship between risk tolerance and WTA viewed as indicating misperceived risks.

But: Risk of RM becoming due (and home equity depleted) when forced to move to long-term care facility could be a deterrent for a rational risk averse individual.

Other uncertainties: tax treatment of RM, size of bequest.

Whether to prefer to consume a little more now and face these risks later on is perhaps not so clear.
Summary

- Paper addresses important question in household finance
Summary

- Paper addresses important question in household finance
- Results illustrate difficulty of reaching/influencing HH with information and education
Paper addresses important question in household finance
Results illustrate difficulty of reaching/influencing HH with information and education
Caveat (empirical analysis): Reverse causality problem
Summary

- Paper addresses important question in household finance
- Results illustrate difficulty of reaching/influencing HH with information and education
- Caveat (empirical analysis): Reverse causality problem
- Caveat (interpretation): There are potential downsides and risks of RM and it is difficult to evaluate how a risk averse individual might feel about these risks