Aging in Place: Analyzing the Use of Reverse Mortgages to Preserve Independent Living

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Underlying Assumption: Reverse mortgages can provide seniors with greater financial security. Increased financial security combined with the ability to remain in one’s own home may lead to independence and overall well-being.
Take-Up of HECMs

Number of Loans by Year

Source: Author’s calculations from HUD HECM data
Shifting Dynamics

- The pool of eligible HECM borrowers is growing.
  - Baby boomer generation turning 62 years old. For half of homeowners aged 62 and older, equity is their primary asset
- The age of the average HECM borrower is getting younger.
  - Nearly half of borrowers in FY2011 were in their 60s, compared with fewer than ¼ in FY2000. (Spike at age 62).
- More HECM borrowers have mortgage debt.
  - More than 65% in 2010, compared with less than 50% in early 2000s.
- Increase in the amount drawn at closing; pending limits to lump sum.
  - 75% of borrowers drew 90%+ of funds at closing in 2010, compared with 43% in 2008. High demand for the fixed rate, lump sum product.
- More borrowers default on property taxes and insurance.
  - 9.8% of borrowers as of June, 2012
Previous Research

• **Potential demand** for reverse mortgages
  • Venti and Wise 1991; Merrill, Finkel, and Kutty 1994; Rasmussen, Megbolugbe, and Morgan 1995; Mayer and Simons 1994; Costa-Font, Gil, and Mascarilla 2010; Shan 2011; Nakajima and Telyukovaz 2011; Davidoff 2012; *Haurin, Ma, Moulton & Seligman 2013*

• **Performance** of reverse mortgages
  • Szymanoski 1994; Chinloy and Megbolugbe 1994; Szymanoski, DiVenti, and Chow, 2000; Rodda, Herbert, and Lam 2000; Shiller and Weiss 2000; McConaghy 2004; Szymanoski, Enriquez, and DiVenti 2007; Yuen-Reed and Szymanoski, 2007; Davidoff and Welke 2007; Bishop and Shan 2008; Kolbe and Zagst 2010; Cushman, 2011

• **Borrower Characteristics**
  • Case and Schnare 1994; Rodda, Herbert, and Lam 2000; DeNavas-Walt, Proctor, and Lee 2006 ; Redfoot, Scholen, and Brown 2007
Previous Research

- **Potential demand** for reverse mortgages
  - 80% of households over age 62 own homes; equity primary source of wealth for more than half of seniors
  - Costs versus benefits; House price increases (and decreases); *reverse mortgages may provide a form of insurance against house price volatility*

- **Performance** of reverse mortgages
  - Reverse mortgages terminate earlier than underlying mortality rates in the general population (average duration 7 years, 10 year survival rate of 22%); Adverse selection?

- **Borrower Characteristics**
  - Reverse mortgage borrowers tend to be older, female-headed households that are better educated than the general population of senior homeowners.
  - Tend to have lower incomes (40% lower), but more equity; although 40% reported using the reverse mortgage to payoff an existing mortgage in 2007.
Unanswered Questions

1. What factors affect consumer decisions about whether or not to get a reverse mortgage and the structure selected (e.g. fixed vs. arm, lump sum, tenure)?

2. How do consumers use the proceeds of the reverse mortgage?

3. What factors affect early termination decisions (including T&I default as well as repayment)?

4. What impact do the decisions about (1), (2) and (3) have on longer term outcomes of financial security and well-being?
Life Cycle Model of Reverse Mortgages

- Predict the decision to obtain a reverse mortgage (empirical model including counseled seniors who received and did not receive a reverse mortgage), and terms of reverse mortgage selected; and

- Empirically evaluate the impact of the reverse mortgage on measures of longer term well-being (financial using credit report data, and quality of life using survey data)
Data Sources

1. CredAbility reverse mortgage counseling data for the years 2006 to 2012, including more than 30,000 seniors;
2. Credit report data at the time of counseling, and annual credit report data thereafter;
3. Data from the Financial Interview Tool, collected at the time of counseling;
4. Loan level HECM data from HUD’s HECM database, including information on T&I defaults;
5. Survey data to be collected (June-July 2013) from current HECM borrowers, terminated HECM borrowers, and seniors who sought counseling but did not get a reverse mortgage.
## Sample Data

### Cause of Financial Problem, Clients Counseled for Reverse Mortgages, 2009-2011

<table>
<thead>
<tr>
<th>Reason</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>INCREASE MONTHLY INCOME</td>
<td>9446</td>
<td>38.0%</td>
</tr>
<tr>
<td>MAKE HOME REPAIRS</td>
<td>1756</td>
<td>7.1%</td>
</tr>
<tr>
<td>PAY OFF EXISTING MORTGAGE</td>
<td>9427</td>
<td>37.9%</td>
</tr>
<tr>
<td>PAY OFF OTHER DEBTS</td>
<td>2740</td>
<td>11.0%</td>
</tr>
<tr>
<td>OVER OBLIGATION</td>
<td>2083</td>
<td>8.4%</td>
</tr>
<tr>
<td>REDUCED INCOME</td>
<td>2604</td>
<td>10.5%</td>
</tr>
<tr>
<td>PROVIDE FOR EMERGENCY EXPENSES</td>
<td>1768</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

Source: CredAbility Counseling Data
## Sample Data

### Credit Report Characteristics, Clients Counseled for Reverse Mortgages, 2009-2011

<table>
<thead>
<tr>
<th></th>
<th>%/Median</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Score (Median)</td>
<td>688</td>
<td>24,253</td>
</tr>
<tr>
<td>Revolving Account Past Due (%)</td>
<td>16.21%</td>
<td>18,388</td>
</tr>
<tr>
<td>Revolving Amount Past Due (Median)</td>
<td>$570</td>
<td>2,980</td>
</tr>
<tr>
<td>Percent with a Medical Collection (%)</td>
<td>36.24%</td>
<td>24,253</td>
</tr>
<tr>
<td>Total Debt (Median)</td>
<td>$45,559</td>
<td>22,933</td>
</tr>
<tr>
<td>Have a First Mortgage (%)</td>
<td>46.70%</td>
<td>24,253</td>
</tr>
<tr>
<td>Balance of 1st Mortgage (Median)</td>
<td>$83,256</td>
<td>11,327</td>
</tr>
<tr>
<td>Mortgage Past Due (%)</td>
<td>18.10%</td>
<td>11,327</td>
</tr>
<tr>
<td>Number of Mortgage Payments Past Due (Median)</td>
<td>5</td>
<td>2,057</td>
</tr>
</tbody>
</table>

Source: CredAbility Counseling Data
Proposed (Pending) Extensions

• Improved estimation of early termination probabilities for different subsets of borrowers, based on up-front borrower characteristics and draw behaviors

• Design, implementation and testing of post-origination monitoring system to prevent early termination (could include different escrow models for T&I)

• Other Ideas?