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### POLICY RESEARCH BRIEF

## Reverse Mortgages: Reducing Financial Risk While Preserving Access

New data show who is at risk for defaulting on a reverse mortgage and ways to reduce risk while keeping the option open for more applicants.

### by STEPHANIE MOULTON, DONALD HAURIN, AND WEI SHI

early one in ten reverse mortgages defaults. The high default rate is a "monkey on the back" of the program, and a concern of many advocates for the elderly. Reverse mortgages are home loans for people age 62 or older that convert home equity into a steady stream of income. The loan must be repaid when the borrower dies, moves, or sells the home. A borrower defaults by missing property tax or homeowner's insurance payments.

The most popular reverse mortgage is the Home Equity Conversion Mortgages (HECM), which is administered and insured by the Department of Housing and Urban Development (HUD). It is available to those who own their homes outright or who can pay off their mortgage with the proceeds of the loan.

The reverse mortgage industry came under fire as defaults rose. In 2013, 9.8 percent of the nearly 600,000 reverse mortgages outstanding were delinquent, up from 8% in 2011, the first year for which statistics are available, according to the federal Department of Housing and Urban Development. Although HUD has since implemented a variety of safeguards, there are still risks. Yet understanding who is at risk for default and why is difficult because, until now, no data existed that could reliably track defaults in detail.<sup>2</sup>

### **KEY FINDINGS**

- Nearly 10 percent (9.4 percent) of all active reverse mortgage HECM loans were in default in 2012, affecting more than 54,000 senior homeowners.
- Risk factors for default include:
  - > Low credit scores,
  - > Being past due on a mortgage payment or having prior liens,
  - > High property tax bills,
  - > Limited liquidity,
  - > Taking larger sums from the reverse mortgage in the first year.
- Limiting the initial withdrawal amount may reduce the default rate by more than 20 percent, but it is also expected to reduce program participation by 20 percent.
- Introducing a minimum FICO credit score of 580 is predicted to reduce the default rate by 37 percent, while reducing the program participation rate by 14 percent.
- Escrowing funds for property tax and insurance payments for borrowers with low FICO scores is predicted to reduce the rate of default by 44 percent while reducing the participation rate by only 4 percent.

A new data set, however, compiles loan data, credit reports, and other financial information on 30,000 seniors who sought counseling for a reverse mortgage between 2006 and 2011.<sup>3</sup> Results of a study using the data show that the three main risks for defaults are lower credit scores, prior defaults on mortgages or property taxes, and large upfront withdrawals. The findings also suggest that the most effective method of limiting defaults without dissuading too many potential applicants is to consider credit scores as part of the underwriting process, and for riskier applicants, set aside funds in an escrow account for property taxes and insurance—both of which HUD is considering as part of its new rules regarding a financial assessment.<sup>4</sup>

## Six Factors that Increase the Risk of Default

As of February 2012, 9.4 percent of all active HECM loans were in default, affecting more than 54,000 senior homeowners.

Six factors increase the risk for default, listed below from highest to lowest *predicted* risk.

- **Credit scores**: Raising the FICO credit score requirement to 580 reduces risk of default by 40 percent. Every 100-point increase in credit score lowers the default risk by 2.3 percentage points.
- Late payments: Those who are past due by two or more months on a mortgage when applying for a reverse mortgage have a 20 percent higher risk of default than others.
- Tax liens: Those with prior tax liens have a nearly 16 percent high risk of default rates than those without liens.
- **High initial withdrawal**: A 10 percent increase in the initial withdrawal (i.e., within the first month) is associated with an approximately 8 percent increase in the default risk.
- A high property tax burden: A 10 percent increase in the property tax burden (taxes as a percent of income) is associated with a 4 percent point increase in the default risk.
- **Limited liquidity**: Not having access to a revolving line of credit (liquidity) increases the likelihood of default by 22 percent.

There are five factors that are not a significant predictor of borrower default:

- Amount of credit card or other installment debt
- Monthly income
- Extent of other assets
- · Prior bankruptcy
- Amount of HECM funds available to the borrower at closing

## Finding the Balance between Dissuading Applicants and Preventing Default

The authors also simulate the tradeoff in various underwriting strategies between reducing the default rate and reducing program participation.

Requiring a minimum FICO score of 500 would reduce the predicted default rate by 12 percent but it would also reduce the mortgage volume by 3.2 percent. Requiring the same applicant instead to set aside money for property taxes and insurance, rather than denying them the loan, would reduce the default rate by 15 percent and the mortgage volume by less than 1 percent. Very few borrowers in the program have credit scores below 500, so this modest change could have a substantial impact.

Requiring a minimum FICO score of 580 has a greater impact, but with a greater tradeoff. It reduces the expected default by 37 percent but it also reduces mortgage volume by 14 percent. However, if an escrow account for property taxes and insurance were required instead of a credit score cut-off, volume would be reduced by only 4 percent but defaults by 44 percent.

Applying credit risk thresholds based on "bad" credit histories instead of credit scores has a very similar impact on the default rate as a credit score cut-off at 580, but reduces HECM volume more, making it potentially less efficient.

Finally, restricting the amount of funds that a person can initially withdraw has an additional impact on the default rate. However, doing so is predicted to substantially reduce volume.<sup>5</sup> To reduce default risk, policy changes have been implemented that restrict the amount of the upfront draw on a HECM. Soon, new risk-based underwriting requirements will be added to the upfront withdrawal restrictions. The findings from this research suggest that both policy changes may reduce default risk, but they may also reduce HECM participation.

In short, setting minimum FICO scores and requiring riskier households to set aside funds in an escrow account at the outset to pay the cost of future property taxes and insurance may be the most effective way to reduce default risk while maximizing participation.

### **Policy Implications**

Some argue that more Americans will need reverse mortgages if they are to have a financially secure retirement.<sup>6</sup> Americans are living longer and many of those on the verge of retirement have not saved enough to avoid a decline in living standards.<sup>7</sup> Others, however, are more skeptical of this projected shortfall.<sup>8</sup>

Nonetheless, there are signs of growing financial fragility among those about to retire. According to the Survey of Consumer Finances, the median net worth among those nearing retirement (ages 45-54 and 55-64) declined by 39 percent and 32 percent, respectively, between 2007 and 2010. Only those aged 35-44 saw bigger declines. A 2012 study found that those age 65 and older are the fastest-growing segment of the U.S. population filing for bankruptcy, largely because of credit card debt.

Those facing sudden catastrophe or in financial straits may turn to reverse mortgages. However, this group may also be at highest risk for defaulting and losing their home as a result. Reverse mortgage users tend to be more financially constrained with lower incomes and fewer assets other than their home. In 2013, HUD instituted several new precautions to avoid undue risk, including limits on the initial withdrawals. The rules limit the amount of equity borrowers can withdraw in the first year to 60 percent of the equity in the home.

The agency will also begin to require lenders to verify that borrowers can afford to pay property taxes and insurance, something called a "financial assessment." If they cannot, they may be turned down for the loan, or the lender can require borrowers to set aside a portion of the available principal to cover future property tax and insurance obligations. Both of these actions may reduce defaults but also reduce the share of seniors who are eligible for the program.

The findings here offer more expansive evidence that underwriting guidelines can help avoid default, albeit with trade-offs of fewer participants. Two options stand out. Credit score thresholds may significantly reduce the risk of default with a limited impact on program participation. Also, rather than denying borrowers with low credit scores access to the program, requiring them to set aside funds in an escrow account to cover property tax and insurance bills may be a better option. Doing so can reduce the risk of default by 44 percent while having limited impact on reverse mortgage volume. Other factors that have been considered by HUD for the financial assessment, such as income or the debt-to-income ratio of applicants matter very little for the risk of default, according to this study.

While a better program now, there are still risks. Reverse mortgages are still mortgages, and like any mortgage, they carry benefits and drawbacks for homeowners. Senior homeowners who do not intend to stay in their house over the long term or who have difficulty maintaining their home may not be a good candidate for a reverse mortgage. As with

any loan, costs must be weighed against the potential benefits, which vary for each individual homeowner. Program changes, like the pending financial assessment, that enable potential borrowers to make better decisions about the appropriateness of the reverse mortgage for them are likely a good thing for homeowners and the program.

These and other safeguards can help preserve the program. If large numbers of seniors with reverse mortgages lose their homes to foreclosure because they cannot pay their property taxes or insurance, the program is not meeting its mandate to help stabilize households. The fact that seniors who are foreclosed on may still have equity in the home is further cause for alarm. Addressing the tax and insurance default problem is thus a significant issue for the viability of the program.

### About the Study

The study created a unique data set that combines borrower demographic, financial, and credit report data with HECM loan data from 30,268 senior households who had attended reverse mortgage counseling between 2006 and 2011. Of those, 16,283 originated a reverse mortgage. The credit report data include credit score, outstanding balances and payment histories on revolving and installment debts, and public records such as tax liens and bankruptcies. The data also include detailed data on the loan transactions, including details on origination, withdrawals, terminations, and tax and insurance defaults. The household level data are linked to this HECM loan data. The analysis also incorporates state economic growth and housing price volatility derived from FHFA and Freddie Mac data. To analyze the risk of default, the study uses a truncated bivariate probit regression for HECM default with an endogenous initial withdrawal amount.

### **Endnotes**

- Marty Bell, "The Right Fix," Reverse Mortgage (July-August 2014). The Consumer Financial Protection Bureau warned seniors to avoid taking a lump sum through a reverse mortgage or they could find themselves without a home or savings if they failed to pay property taxes and insurance. Unscrupulous agents had pitched reverse mortgages to senior citizens needing quick cash under rules that allowed borrowers to take out and quickly spend most of their equity. Those rules have since been revised. The new rules limit the amount of equity borrowers can draw upfront.
- 2. A 2013 IFE study provided some information about characteristics associated with default, but the data are limited and lack important borrower characteristics such as income, assets, and credit scores. Integrated Financial Engineering (IFE), "Actuarial Review of the Federal Housing Administration Mutual Mortgage Insurance Fund HECM Loans for Fiscal Year 2013" (Washington, DC: U.S. Department of Housing and Urban Development, 2013).
- Stephanie Moulton, Donald R. Haurin, and Wei Shi, "An Analysis of Default Risk in the Home Equity Conversion Mortgage Program." Working paper. (Rochester NY: Social Science Research Network, July 18, 2014). Available at http:// dx.doi.org/10.2139/ssrn.2468247
- 4. Previously, there were no risk-based underwriting criteria for reverse mortgages such as credit score or income because there is no required monthly payment for the mortgage. However, underwriting criteria can be used to assess a borrower's ability to pay ongoing property tax and homeowner's insurance payments.
- 5. The reduction in participation is driven by borrowers who may no longer elect to take out a reverse mortgage when the amount of funds they can receive upfront is restricted The impact of take-up rates may be overstated if borrowers are only restricted during the first year. If they can withdraw as much as they want in the second year, for example, they may still be willing to take out a reverse mortgage—and thus these estimates may be overstated.
- 6. Alice Munnell, "Reversing the Negative View of Reverse Mortgages," Encore blog on Wall Street Journal Market Watch. http://ht.ly/zPT1S.
- 7. The National Retirement Risk Index (NRRI), calculated by the Center for Retirement Research at Boston College, finds that 53 percent of working-age households will be unable to maintain their standard of living in retirement.

- 8. Andrew Biggs and Sylvester Schieber as well as John Karl Scholz and Ananth Seshadri argue that the metrics are wrong and that Americans have saved more than suggested. They also suggest that the "replacement rate" (the money needed to sustain a lifestyle in retirement) is set too high, for a variety of reasons. Andrew Biggs and Sylvester Schieber, "Is There a Retirement Crisis?" *National Affairs*, June 25, 2014. http://ht.ly/zPYzf
- 9. Federal Reserve Board, "Consumer Finance Survey, Chartbook 2010" (Washington, DC: U.S. Federal Reserve Board, 2010).
- John Pottow, "The Rise in Elder Bankruptcy Filings and Failure of U.S. Bankruptcy Law," *Elder Law Journal*, 19 (2012).
- 11. Donald Haurin et al., Spatial Variation in Reverse Mortgages Usage: Housing Price Dynamics and Consumer Selection," *Journal of Real Estate Finance and Economics* (2014); M. Nakajima and I. A. Telyukova, "Reverse Mortgage Loans: A Quantitative Analysis." Working paper no 13-27. (Philadelphia: Federal Reserve Bank, 2013).

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### ABOUT THE HOW HOUSING MATTERS TO FAMILIES AND COMMUNITIES RESEARCH INITIATIVE

This brief summarizes research funded by the John D. and Catherine T. MacArthur Foundation as part of its How Housing Matters to Families and Communities Research Initiative. The initiative seeks to explore whether, and if so how, having a decent, stable, affordable home leads to strong families and vibrant communities. By illuminating the ways in which housing matters and highlighting innovative practices in the field, the Foundation hopes to encourage collaboration among leaders and policymakers in housing, education, health, and economic development to help families lead healthy, successful lives. The views expressed herein are not necessarily those of the MacArthur Foundation.

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