



Promoting research on retirement and Social Security policy

Research Brief 351 | September 2016

How Home Equity Extraction and Reverse Mortgages Affect the Credit Outcomes of Senior Households

Stephanie Moulton, Donald Haurin, Samuel Dodini, and Maximilian D. Schmeiser *

Introduction

More than 80 percent of senior households in the U.S. own their home, and nearly half of the net worth for the median senior is in the form of home equity. Senior households who desire to consume home equity may be unwilling to sell their homes or may be unable to qualify for or afford an additional mortgage. Reverse mortgages including the federally insured Home Equity Conversion Mortgage (HECM) are designed to address this tradeoff, with limited underwriting and no required repayment until the borrower no longer lives in the home. The underlying policy assumption is that HECMs can provide seniors with “greater financial security” by providing a vehicle to “supplement Social Security, meet unexpected medical expenses, and make home improvements” without the monthly carrying costs of a forward mortgage.

What happens to seniors after they extract home equity through borrowing, particularly through a reverse mortgage? How do their financial outcomes change relative to similar seniors extracting equity through other channels or seniors unable or unwilling to borrow? In this paper, we examine how equity extraction, including but not limited to equity extracted through HECMs, affected the financial outcomes of seniors both during and after the Great Recession. Our primary analysis focuses on a specific set of financial outcomes—a senior’s use and management of credit. We pay particular attention to revolving credit card debt, as distinct from nonhousing installment loans. Aside from the amount of debt held by a consumer, we also consider the ability of a household to pay their debts as indicated by payment delinquency.

Data and Methodology

This paper uses data from the Federal Reserve Bank of New York/Equifax Consumer Credit Panel (CCP), representing a 5 percent random sample of U.S. households. We identify seniors in the CCP dataset who extracted equity through cash-out refinancing, home equity lines of credit (HELOCs) or home equity loans (HELOANs) between 2008 and 2011. As reverse mortgages are not reported in consumer credit files, we supplement the CCP dataset with our unique credit panel dataset of HECM borrowers who originated a reverse mortgage between 2008 and 2011. In both datasets, we track consumer

* *Stephanie Moulton* is an associate professor at The Ohio State University’s John Glenn College of Public Affairs. *Donald Haurin* is professor emeritus of economics at The Ohio State University. *Samuel Dodini* is a policy analysis and management PhD candidate at Cornell University. *Maximilian D. Schmeiser* is manager, economics, and head of risk and analytics at Amazon Lending. This research brief is based on MRRC Working Paper 2016-351.

credit records at the individual level for two years prior and three years after extraction. Using the CCP dataset, we also follow the credit records for a random sample of seniors not extracting equity during the same period.

We estimate differences-in-differences by extraction channel using individual fixed effects panel regression. We first compare trajectories for the entire sample, and then estimate regressions for a matched sample of households who are otherwise similar with regard to geography, credit, and mortgage characteristics prior to originating an equity extraction loan. This allows us to better isolate the effect of the channel of extraction on credit outcomes, holding constant borrower characteristics that might vary systematically by channel.

Results and Discussion

We find that different borrowing channels are associated with very different credit trajectories for seniors both prior to and after extraction. The predominant form of equity extraction among seniors in our sample is borrowing through a HELOC. Our results indicate that HELOC borrowers tend to have strong credit profiles prior to extraction that remain strong post extraction. By contrast, HECM borrowers in our sample had much lower credit scores at the time of loan origination. Seniors originating a HECM were also much more likely to have had a prior credit shock, defined as a drop in credit score of 25 points or more: Nearly 30 percent of HECM borrowers experienced a shock two years prior to origination, compared to 15 percent of other extractors. Across all channels of extraction, seniors with a credit shock who extract equity demonstrate an increase in credit card balances prior to extraction that subsequently declines post extraction.

There are also noticeable differences in credit outcomes by extraction channel. While there is some decline in nonhousing debt across all borrowing channels, the decline is the greatest among seniors extracting equity through a HECM, and particularly for credit card debt. For example, our matched sample difference-in-difference estimates indicate that credit card balances for HECM borrowers decline by \$3,000 more than nonextractors over the same period. Credit card balances for HELOC and HELOAN borrowers decline by only about \$500 relative to nonextractors, and credit card balances increase post-extraction for cash-out refinance borrowers.

With regard to payment delinquencies, we find that all types of extractors have an increase in the probability of being 60 days or more late on a debt payment post extraction relative to nonborrowers in the matched sample. The results for foreclosure are more nuanced by channel, where cash-out and HELOAN borrowers tend to perform worse post-extraction, and HELOC and HECM borrowers tend to perform relatively better. To the extent that equity extraction increases total monthly debt payments, the household may be at greater risk of default on their mortgage, particularly if the senior experiences a shock to his or her income. Given that the HECM does not require a monthly payment, extracting equity through a HECM does not increase the monthly debt to income burden as it may for other channels of extraction.

Relative to other borrowing channels, the HECM appears to play a unique role in providing seniors with access to equity through borrowing, particularly to help seniors recover from financial shocks. Historically, the HECM program has had no credit or income-based underwriting. However, relatively high rates of default on property taxes and homeowner's insurance have led to significant policy changes since 2014, such as limitations on the initial withdrawal amount and changes to underwriting criteria to include consideration of credit history and income (Moulton, Haurin, and Shi, 2015). A policy challenge for the HECM program moving forward is to preserve program access to seniors who may be cut-off from other home equity borrowing channels, while minimizing the risk that borrowers will be unable to afford to maintain the home, including payment of property taxes and homeowners insurance.

University of Michigan Retirement Research Center

Institute for Social Research 426 Thompson Street Room 3026
Ann Arbor, MI 48104-2321 Phone: (734) 615-0422 Fax: (734) 615-2180
mrrcumich@umich.edu www.mrrc.isr.umich.edu

Sponsor Information: The research reported herein was performed pursuant to grant RRC08098401-08 from the U.S. Social Security Administration (SSA) through the Michigan Retirement Research Center (MRRC). The findings and conclusions expressed are solely those of the author(s) and do not represent the views of SSA, any agency of the federal government, or the MRRC.

Regents of the University of Michigan: Michael J. Behm, Grand Blanc; Mark J. Bernstein, Ann Arbor; Laurence B. Deitch, Bloomfield Hills; Shauna Ryder Diggs, Grosse Pointe; Denise Ilitch, Bingham Farms; Andrea Fischer Newman, Ann Arbor; Andrew C. Richner, Grosse Pointe Park; Katherine E. White, Ann Arbor; Mark S. Schlissel, *ex officio*