

Encyclopedia Entry

Reverse Mortgages¹

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Synonyms: Home Equity Conversion Mortgage (Note: HECM refers to the insured reverse mortgage program administered by the Federal Housing Administration in the U.S.); Home Equity Conversion Loan.

Definition: Reverse mortgage loans are a financing instrument that allows older adults to borrow using their primary residence as collateral. The “reverse” means that it is the opposite of traditional mortgage loans: reverse mortgage borrowers receive payments from the lender and repay the loan at the end, while traditional mortgage borrowers make monthly payments to the lender until the loan is repaid in full. The primary purpose of reverse mortgage loans is to help the older people access their home equity while staying in their house.

This entry focuses on the Home Equity Conversion Mortgage (HECM) program, the most common reverse mortgage product in the U.S. Reverse mortgages are available for senior homeowners (age 62 or older in the U.S.) within certain requirements on their property. The

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amount of the loan is determined by factors including the age of the borrower, the estimated value of the property, and the interest rate; the total loan amount is also capped at a specific level. The loan can be taken in the form of a lump sum, tenure payments, fixed-term payments, a line of credit, or a combination of monthly payments and a line of credit. Typically, repayment of the loan is only due after the borrowers on the loan sell the home, die, or move out of the house. When the loan is due, the property owner will sell the house to repay the loan or to repay the loan with other funds and keep the house. If the home is sold to repay the loan, the estate can receive any remaining equity if the home sells more than the loan balance. A key feature of these loans is that the borrower, or the borrower's heirs, are not liable for repaying the loan if the home sells for less than the loan balance.

Overview

Financial security in retirement is becoming a challenge as many countries are seeing significant gains in longevity (Eggleston and Mukherjee 2018). As a significant source of wealth, housing assets could be used to fund longevity. In the U.S., about 80 percent of senior households own a home, and housing assets are the most valuable type of wealth for a large number of seniors (U.S. Census Bureau 2015; Consumer Finance Protection Bureau 2017). However, people are usually unwilling to move out of their home at an older age (Harrell et al. 2014). Reverse mortgage loans are designed as an innovative financing tool for the elderly to stay in their house and convert their home equity into payments for consumption.

The first reverse mortgage loan is written in the U.S. in 1961. The most common reverse mortgage product today is the Home Equity Conversion Mortgage (HECM) program, which was established in 1988 as part of the Housing and Community Development Act of 1987. The number of HECM originations grew slowly in the 1990s, and after 2000s there was a rapid

market expansion until the 2008 financial crisis (Munnell and Sass 2014). While there is a private market for reverse mortgage loans (the jumbo market, for example, which offers higher loan limits than HECM), HECM loans dominate the market. Not surprisingly, with the aging population around the globe, reverse mortgage loans have appeared in many developed economies, including Canada, the UK, Australia, Italy, Japan, and Korea (Fornero et al. 2016; Heo et al. 2016; Warshawsky and Zohrabyan 2016; Kobayashi et al. 2017). The product is also under policy discussion in developing countries, such as China (Hanewald et al. 2019).

The most important benefit of reverse mortgages to senior homeowners is that they can remain in their homes while receiving income from their housing equity. A common use of reverse mortgages is to obtain a lump-sum payment to pay off the borrower's previous traditional (forward) mortgage debt and thus relieve the borrower of monthly payments, freeing up cash flow for consumption. Also, with reverse mortgage loans, the borrowers are insured against the risk of a decline in their house value, because if the property is sold at a price below the loan balance when the reverse mortgage is due, the remaining balance is forgiven. There is also a tenure option in which borrowers can receive an annuity payment each month as long as they live in the house, which protects them from outliving their wealth; yet traditionally few borrowers select this option.

There could be downsides to reverse mortgage products, especially for less-informed consumers. For example, a reverse mortgage may exacerbate under-saving among some elderly because it makes it easier for borrowers to cash out their housing equity without more deliberate long-term planning. Another concern is the requirement of timely payment of property taxes and homeowner's insurance; if borrowers fail to pay these amounts, the lender pays it out of the home equity. Once there is no remaining equity, the unpaid taxes and insurance payments can

result in a mortgage foreclosure. More than ten percent of HECM borrowers were in technical default on their property taxes or homeowner's insurance in 2014, indicating the significance of this problem (Moulton et al. 2015). Finally, there is a residential requirement with the federally insured reverse mortgage, where borrowers must reside in the property as their principal residence the majority of a calendar year. If the borrowers move out of the home, such as to a nursing facility, they have to sell the home or repay the reverse mortgage loan.

We refer readers interested in acquiring more detail on individual mortgage decisions, including on reverse mortgages, to a review piece by Ghent and Yao (2016).

Key Research Findings

There are three main streams of research on reverse mortgages. The first focuses on analyzing the demand for reverse mortgages using theoretic models, empirical survey data, and simulations. Most early studies estimate the potential market volume of reverse mortgage, influencing policymakers on the need for these loans (Venti and Wise 1991; Mayer and Simons 1994; Merrill et al. 1994). More recent research usually takes advantage of available data to examine the actual initiation of reverse mortgages and the home equity underlying the loans (Shan 2011; Haurin et al. 2016; Moulton et al. 2015; Moulton et al. 2016; Davidoff and Welke 2017; Hwang and Mayer 2018).

While the potential market size estimates differ within a wide range, a stylized fact is that the take-up rate of reverse mortgage loans is low. In other words, a large number of senior homeowners who would benefit from taking a reverse mortgage loan are not doing so (Nakajima 2012; Warshawsky and Zohrabyan 2016). In the U.S., only about two percent of senior households with an owned home have a reverse mortgage, and a conservative estimate of households that would benefit from such loans is nine percent (Merrill et al. 1994; Moulton et al.

2017). As a result, many studies are devoted to explaining the low demand for reverse mortgages. The low demand is commonly attributed to the high costs of reverse mortgage products and bequest motives (Redfoot et al. 2007; Nakajima and Telyukova 2017), though some recent research argues that these reasons cannot explain this puzzle satisfactorily (Cocco and Lopes 2015; Davidoff 2015).

The second stream of studies concentrates on borrower characteristics and experiences. The literature predicts that the demand is the strongest amongst those low-income homeowners and those with limited non-housing assets, which is confirmed by empirical studies (Redfoot et al. 2007; Moulton et al. 2016; Moulton et al. 2017). Haurin et al. (2016) examine state-level data on HECM take-up rates, and find evidence suggesting that senior homeowners in states with more volatile housing prices and with house prices above the long-term norm were more likely to use HECMs, potentially as a hedge against future house price declines. Through a specially designed survey, Davidoff et al. (2017) find that U.S. senior homeowners have limited knowledge about the HECM contract terms. They also find that more knowledgeable seniors and those with peers using HECM seem to be more willing to use reverse mortgages. In terms of borrower satisfaction, Loibl et al. (2018) find that those with a reverse mortgage enjoy a higher level of housing and financial satisfaction than similar homeowners who were interested in a HECM loan but did not take one out.

Finally, a separate stream of research explores ways to protect consumers, improve product design and improve government regulation of the reverse mortgage market. There has been criticism on reverse mortgages in the media, arguing these loans have fees and charges that are too expensive for most people (Lichtenfeld 2018). Moulton et al. (2015) report that 12 percent of HECM borrowers were in default in 2014, indicating potential issues with borrowers

not fully understanding the contract terms of the reverse mortgage, or lacking the financial planning needed to manage cash flows. Through an analysis of individual level borrower data on take and insurance default, Moulton et al. find that changes in underwriting criteria and regulations may help reduce the default rate without overly restricting access to HECM loans.

There are also other challenges for reverse mortgage products. Davidoff (2014) suggests that the uniform pricing feature across multiple dimensions may cause adverse selection and moral hazard, since HECM products provide different financial benefits across states when housing prices change, yet all loans had the same insurance premiums across states. Besides the concerns about informational asymmetry, changes in the design of the reverse mortgage products have also been proposed, such as securitization of longevity risk with survivor bonds (Wang et al. 2008).

Relatedly, a series of studies examine different retirement wealth managing strategies involving HECMs (Sacks and Sacks 2012; Salter et al. 2012; Pfeiffer et al. 2014; Pfau 2016; Lucas 2018). According to the Consumer Finance Protection Bureau (CFPB 2017), seniors can use a reverse mortgage loan to delay their claiming of Social Security benefits, which may be actuarially advantageous for many beneficiaries (Shoven and Slavov 2014). However, the CFPB also expresses concern that the costs of taking the reverse mortgage frequently exceed this gain in Social Security benefit levels, especially if the loan is only held a short time. With recent evidence suggesting asset management strategies for Medicaid eligibility at older ages (Liu and Mukherjee 2018), it is worthwhile to test whether and to what extent there is any strategic use of reverse mortgage for social insurance benefits.

Future Research Directions

The low take-up rate of reverse mortgages calls for future research to provide a more comprehensive explanation. A key issue to be explored in this context is consumer protection, with emerging evidence suggesting that senior homeowners may not be well-informed in evaluating their own housing assets (Haurin et al. 2018) and financial knowledge in general (Lusardi et al. 2014).

Further research related to government regulation would be helpful, especially pertaining to the role of the Federal Housing Administration (FHA). As the FHA insures all HECM loans via the Mutual Mortgage Insurance Fund, it faces significant risk related to home values and interest rate changes. The insurance fund balance has been highly volatile with huge liability estimates in some years due to HECMs. Therefore, the FHA has tightened access to HECMs in recent years by requiring a financial assessment of borrowers (including credit history) and by lowering loan-to-value ratios, which has caused a reduction in market volume.

Given the high costs of taking HECM loans (Lucas 2018), and that generally borrowers need to hold their loan for eight to ten years for the costs to outweigh the benefits, it would be worth discussing how the FHA might improve consumer welfare with lower costs, but still maintaining a healthy insurance fund. Reducing the premiums may not be feasible without subsidy, as the loans are risk-based and the FHA premiums must break even for HECMs to continue. Another option might be to reduce fees and commissions to lenders and brokers, but such changes will likely deter lenders and brokers from marketing and making loans. Thus, these topics remain open for future inquiry.

Finally, it will be helpful to review the research findings and policy levers related to the reverse mortgage market as it develops internationally. The potential growth of this market as the

population ages in developed and developing countries with high rates of homeownership will be important to monitor.

Summary

The use of housing-related financial instruments has been increasingly common at an older age (Collins et al. 2018). Along with long term care insurance and annuities, reverse mortgage loans are an important tool for retirement wealth management (Davidoff 2009). While it holds promise to enhance social welfare by helping senior homeowners stay in their residence and cash out their home equity at the same time, the take-up rate has been lower than expected and there are concerns that these loans might harm less-informed consumers. Many open questions remain for researchers and policymakers to explore with both newer data and experiences from international settings.

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