Chapter 58

Understanding Ginnie Mae Reverse mortgage H-REMICs: Its programs and cashflow analysis

C. H. Ted Hong, PhD
George H. Lee, CFA

Abstract
A reverse mortgage is a financial product that allows a senior homeowner to access their home equity. In contrast to a traditional or conventional “forward” mortgage, a reverse mortgage allows the borrower to draw on the equity in the home and only repay the loan when they vacate the house. This allows a borrower with few liquid assets but a lot of accumulated home equity to access trapped cash. The FHA’s reverse mortgage program referred to as the Home Equity Conversion (HECM) program was established in 1989, though Ginnie Mae mortgage-backed securities backed by HECM’s (HMBS) were issued for investors and the first Ginnie Mae H-REMIC (CMO) backed by multiple HMBS pools was not issued until 2009. The methods and parameters used to compute yields with varying LIBOR assumptions for CMO tranches backed by reverse mortgages differs from those for traditional mortgages.

Key words
Reverse mortgage • HECM • HMBS • H-REMIC

Introduction
A reverse mortgage is a type of mortgage that borrowers, instead of paying the lender, will receive fixed or variable cash flow payments before the maturity date or when the home owner vacates the property used as collateral. The loan is only repaid if the property is sold or refinanced. A reverse mortgage is designed for senior home owners, 62 years of age or older, in the U.S. to maximize the duration of receiving payments against their properties. As baby boomers started to retire and the demographic pyramid gradually flattened, the eligible pool of borrowers for reverse mortgages increased in the past decade. There are three types of reverse mortgages:

1. Single purpose reverse mortgages — these are offered only by some state and local government agencies and nonprofit organizations, like credit unions.
2. FHA insured reverse mortgages — also known as Home Equity Conversion Mortgages (HECMs) and backed by the US Department of Housing and Urban Development (HUD).
3. Private/Proprietary reverse mortgages — private loans, typically backed by the insurance or specialty finance companies that originate them.

The Author would like to thank Rico Fu for preparing the H-REMIC Analytics in the Beyondbond, Inc. proprietary systems and Joseph J. Kelly from New View Advisors LLC for his invaluable assistance in validating our computational results.
Single purpose reverse mortgages are not available everywhere and can only be used for the purpose specified by the lender or the government, for example, a loan is made for repairs or property taxes only. The most popular type for U.S. seniors is the HECM program. The HECM is run by the U.S. Department of Housing and Urban Development through the Federal Housing Administration (FHA).

The FHA Home Equity Conversion Mortgage (HECM) program

The FHA’s HECM platform has a dominant market share in excess of 90% and is where we focus further analysis and discussion. The FHA’s Home Equity Conversion Mortgage (HECM) program, which was piloted in 1989 and made permanent in 1998, allows older homeowners to withdraw some of the equity in their homes.

In addition, a HECM mortgage may be used to purchase a primary home when the borrower is 62 years of age or older and is able to use assets to fund the difference between the reverse mortgage and the sales price plus closing costs.

Unlike for a traditional forward mortgage, the HECM borrower does not make payments to the lender; rather, the lender makes payments to the borrower. A HECM mortgage allows a borrower to extract a portion of the equity in the home while continuing to live in the residence, and in that sense, a HECM resembles a Home Equity Line of Credit (HELOC). HECM loan origination has grown steadily since the program’s inception in 1989. Figure 1 shows that annual loan origination has increased from $544 million in 2000, peaking at $21.7 billion in 2009, to $10.9 billion for 2011. Figure 2 adds the maximum claim about to the initial principal limit to the annual loan origination chart.

58.1.1 HECM vs. HELOC

A HECM mortgage allows a borrower to extract a portion of the equity in the home, while continuing to live in the residence, and in that sense, a HECM resembles a traditional or conventional Home Equity Line of Credit (HELOC). However, a HECM differs from a HELOC in the following ways: