







A Comparative Analysis of Reverse Mortgages: Evidence from Puerto Rico and the United States

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Introduction and Definition

• A reverse mortgage is a type of loan granted to a senior citizen (minimum age of 62 years), who owns a primary residence, to convert the accumulated home equity in a source of cash.

• Reverse mortgages receive their name because the observed payment pattern is the opposite of a traditional mortgage (forward mortgage).









Types of Reverse Mortgages

The different types of reverse mortgages are based on the way the funds are received by the borrowers:

- 1. Lump Sum (LSUM)-one single amount
- 2. Tenure (TEN)-equal monthly payments as long as one borrower lives in the property (as a principal residence)
- 3. Term (TERM)-equal monthly payments for a specific number of months
- 4. Line of Credit (LOC)-series of payments until the approved amount is exhausted
- 5. Tenure and Line of Credit (also known as "Modified Tenure")-combination of Tenure and LOC
- 6. Term and Line of Credit (also known as "Modified Term")-combination of Term and LOC









Origin of Reverse Mortgages; Insured Loans and Non-insured Loans

- The first known case of a reverse mortgage loan in the United States (U.S.) is from 1961.
- The first reverse mortgage insured by the federal government (co-sponsored by AARP) in the U.S. was originated in 1989.
- Home Equity Conversion Mortgages (HECM) are reverse mortgages insured by the Federal Housing Administration (FHA).
- Non-FHA insured reverse mortgage loans are known as "proprietary reverse mortgages" (offered by private sector banks and mortgage companies).









Development of the Reverse Mortgage Market in the U.S.

From 2000 to 2007 there was a significant increase in the number of reverse mortgages generated in the U.S. due to:

- (a) An increase in property values,
- (b) Low interest rates,
- (c) Increase in the life expectancy and growth of the "baby boomer" population
- (d) Increased awareness of the availability of reverse mortgages.







Development of the Reverse Mortgage Market in the U.S.

To qualify for a HECM loan, a borrower:

- 1. Must be at least 62 years old.
- 2. Must live in the residence and the property must either be "debt free" or the balance of the mortgage loan must be low.
- 3. Must not be delinquent on any federal debt.
- 4. The borrower, spouse and their heirs (children or nearest relatives) must attend a financial counseling session prior to the approval of the loan.







Average Borrower Profile in the U.S.

- Study made by HUD in 2006 → the average age of a reverse mortgage borrower is 74 years and the average mortgage amount is USD \$159,000 on a house valued at USD \$289,000 (55% Loan to Value ratio).
- Study made by Reverse Market Insight in 2009 → 75% of reverse mortgage borrowers used the funds to pay other debt.
- Study made by MetLife in March 2012→ the average age decreased to 71.5 and 66% of the applicants used the funds to pay other debt.









Advantages and Disadvantages of Reverse Mortgages for Homeowners

Advantages:

- -may obtain cash from the use of the primary residence as collateral to cover their economic needs without having to abandon the property.
- obtain protection against the possible reduction in the value of the property.

Disadvantages:

- -could discourage savings among senior citizens.
- -are exposed to the risk of having to move from their house after having obtained the loan and paid the loan's closing and origination costs (In 2009, the average life of a reverse mortgage in the U.S. was seven years).
- -moral hazard problems could increase if there is inadequate maintenance or protection of the property.



Recent Developments of the Reverse Mortgage Market in United States (U.S.)



• Between June 17, 2011 and May 2, 2012, three of the leading banks in the generation of reverse mortgages in the U.S. (Bank of America, Wells Fargo and MetLife Bank) decided to withdraw from this market segment.



• Among the reasons provided by these banks are the generalized reduction in housing prices in the U.S. and the difficulties in evaluating the financial situation of the applicants for these types of loans.



• The expected effect from the exit of these three banks will be the entry of more efficient smaller institutions that specialize in this type of financing.









Recent Developments of the Reverse Mortgage Market in Puerto Rico (P.R.)

- The Office of the Commissioner of Financial Institutions of Puerto Rico (OCIF, by its acronym in Spanish) is the local financial regulatory entity.
- Reverse mortgages were initially offered in P.R. in 1993, but demand for this type of financing did not increase significantly until 2010.
- OCIF started to compile statistical data for this type of loan during the first quarter of 2010.









Databases

We use data from different sources:

- 1. The HUD Puerto Rico Field Office provided us with information related to the endorsed HECM loans originated in the U.S. and P.R. during the fiscal years ended on September 30, 2012, 2011 and 2010, respectively.
- 2. OCIF provided us with aggregate information for the reverse mortgage loans originated by financial institutions in P.R. from the first quarter of 2010 to the first quarter of 2012.
- 3. A mortgage bank in P.R. provided us with information from a sample of reverse mortgage loans originated from the first quarter of 2010 to the first quarter of 2012.
- 4. Consumer Credit Counseling Services of P.R. (CCCS) provided us with the number of financial counseling sessions offered to consumers interested in obtaining reverse mortgage loans from the first quarter of 2010 to the first quarter of 2012.









Results (U.S. and P.R.)

- The number of new reverse mortgages generated in the U.S. and in P.R. decreased from 2010 to 2012.
- In 2010 the average amount of new reverse mortgages originated in the U.S. was 25% higher than in P.R. This gap decreased to approximately 20% in 2011.
 - The most common type of HECM Loans endorsed in the U.S. and P.R. during 2010 was LOC.
- In 2011 and 2012, the most frequent type of HECM loan endorsed in the U.S changed to LSUM, whereas in P.R. there was no change (LOC continued to be the typical HECM loan).
- The average age of reverse loan mortgagees decreased both in the U.S. and in P.R. from 2010 to 2012.









The 50 states versus P.R.

- In 2010, P.R. had the 14th highest number of loans among states and territories and occupied the 28th position in terms of population.
- In 2011, P.R. had the 13th highest number of loans among states and territories and occupied the 27th position in terms of population.
- In 2012, P.R. became the jurisdiction that had the 10th highest number of loans among states and territories and occupied the 27th position in terms of population.
- This suggests that, in comparison to other jurisdictions, there has been an increase in the use of this instrument in P.R.
- In 2011 and 2012, P.R. became the jurisdiction with the second highest proportion of loans to population.









The 50 states versus P.R., continued

- P.R. had the highest average interest rates on reverse mortgage loans from 2010 to 2012.
- In 2010 and 2011, P.R. was among the first ten states with the youngest average age among reverse mortgage borrowers.









Other Results

According to the data provided by **OCIF**:

- 1. There has been a reduction in both the <u>number</u> and in the average <u>amount</u> of reverse mortgage loans originated in P.R. during 2011 and the first quarter of 2012.
- 2. The number of financial institutions offering this product in P.R. has increased.

According to the data provided by **CCCS**:

- 1. There has been a reduction in the number of financial counseling sessions offered from 2010 through the first quarter of 2012.
- 2. Approximately 50% of the applicants that received counseling services did not complete the loan process.









Other Results, continued

According to the sample data obtained from a financial institution in P.R. that offers reverse mortgages:

- 1. The average age of the mortgagees is 70, most of whom are women and unmarried.
- 2. Approximately 50% of the funds (from the approved reverse mortgages) were paid out to the mortgages for their economic needs.









Conclusions

- Changes in the volume of reverse mortgages generated in the U.S. and P.R. might be due to changes in the required cash flow needs of the borrowers or the entry of specialized (smaller) financial institutions granting reverse mortgages.
- The reduction in the average age of the borrowers seems to be associated with the fact that younger retirees are using reverse mortgages sooner to offset their increased cost of living, inflation, and depleted savings and investment portfolios, among others.









Conclusions, continued

• The reduction in the number of reverse mortgages granted in P.R., the average age of the borrowers and the use for the borrowed funds is consistent with other studies performed in the U.S. (Elmer, 2012, Michelangeli, 2008 and Detwiler, 2008).









Limitations

- This study has the following limitations:
 - 1. The data obtained from HUD is for fiscal years ended on September 30, 2010 through 2012.
 - 2. The data obtained from OCIF, CCCS and a mortgage bank in P.R. was for natural years 2010 and 2011 and for the first quarter of 2012.
 - 3. Another limitation is that we do not have the data related to the number of financial counseling sessions offered by authorized counseling entities in P.R. other than CCCS.
 - 4. In addition, certain data is defined differently by each institution, for example HUD uses average interest rates while OCIF uses weighted average interest rates. This limits our comparison between the available data sets.









Future research

According to Del Vecchio, Hopson and Hopson, (2009), on average, 50% of reverse mortgages generated in the U.S. terminate (are cancelled) in seven years. The questions for future research are:

- 1. What happens when senior citizens deplete the funds received from the reverse mortgages and have no means to pay property taxes and hazard insurance on their homes?
- 2. What would be the policy implications of this situation?
- 3. How would (should) financial institutions and state governments handle this situation?
- 4. How would the results in P.R. compare with the U.S.?









Questions?

