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

Research proposal by:
Rogelio J. Cardona, Ph.D., CPA, Esq., Assistant Professor, Accounting Department
Karen C. Castro-González, Ph.D., CPA, Assistant Professor, Accounting Department

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ABSTRACT

The objective of this investigation is to perform a comparative study of reverse mortgages in Puerto Rico and the United States. This study contributes to the household finance literature by examining the characteristics of the reverse mortgages generated by elderly consumers in Puerto Rico during their retirement stage. The results are examined, compared and evaluated considering evidence and other studies on reverse mortgages in the United States.

We will use data from the from the Department of Housing and Urban Development (HUD) Puerto Rico Field Office to compare the average loan amount and the number of reverse mortgage loans granted during 2010 and 2011 in the United States with the results observed in Puerto Rico to determine whether differences exist and the possible reasons for the latter.

Key words: Reverse mortgages, home equity, elderly consumers

Introduction

From 2000 to 2005 there was an increase in housing prices (housing bubble) in the United States (U.S.) and in Puerto Rico (P.R.). The financial markets in the U.S. took advantage of that bubble to aggressively promote a product known as reverse mortgage. Reverse mortgages allow an elderly consumer to obtain cash using his (her) dwelling as collateral without having to abandon the property. As a result of the increase in housing values there was a significant increase in the demand for reverse mortgages in the U.S. Reverse mortgages were initially offered in P.R. in 1993, but demand for this type of financing did not pick up until 2010.

The objective of this investigation is to perform a comparative study of reverse mortgages in P.R. and the U.S. This study contributes to the household finance literature by examining the characteristics of the reverse mortgages generated by elderly consumers in Puerto Rico during their retirement stage. The results are evaluated considering evidence and other studies on reverse mortgages in the U.S.

Literature Review

Evolution and Regulation of Reverse Mortgages in the U.S.

Shan (2011) defines a reverse mortgage as a loan granted to an elderly housing owner that transforms his (her) home equity in a source of cash that does not require the payment of interest or the principal until the last of the surviving borrowers dies (in the case of a couple), or the borrower moves permanently from the house. Michelangeli (2008) defines these instruments as private loans insured by the U.S. government designed for home owners that have their net worth tied to their homes but have little or no cash. Szymanoski, Enriquez and DiVenti (2007) state that reverse mortgages receive their name because the observed payment pattern is the opposite of a traditional mortgage (forward mortgage).

The first known case of a reverse mortgages in the U.S. is from 1961, but it was not until 1989 when the first mortgage of this type was insured by the federal government (Donohue, 2011). From 2000 to 2007 there was a significant increase in the number of reverse mortgages generated in the U.S. (Bishop and Shan, 2008; Shan, 2011 and Nakajima, 2012). Bishop and Shan (2008) suggest that the increase in reverse mortgages from 2000 to 2005 could have occurred due to several reasons: the housing bubble, low interest rates, owners' confidence in using their homes as collateral for obtaining loans and a growing awareness of the availability of reverse mortgages. Helm (2008) also identifies demographic factors such as the increased average life expectancy and the number of persons entering retirement age that belong to the segment of the population known as ñbaby boomersò. McGarity (2007) states that unlike the Depression-era generation that was much more conservative and felt the need to leave a legacy to their heirs, baby boomers do not have the same priorities and understand that they can use their home equity to meet their economic needs.

According to Bishop and Shan (2008) 90% of the reverse mortgages originated in the U.S. are classified as Home Equity Conversion Mortgages (HECM), which are insured by the United States Housing and Urban Development (HUD). To qualify for an HECM, the borrower must be at least 62 years old, live in the residence and the property must either not have a mortgage lien or the amount of the loan must be low (Bishop and Shan, 2008). The borrowerôs income level or credit score does not affect his (her) eligibility for a reverse mortgage. The amount borrowed depends on the appraised value of the residence, the age of the youngest residence owner (in the case of a couple) and the expected interest rates. Age is important because the older a borrower is, his (her) life expectancy is lower, and there is less time for the loan balance to increase. Lower interest rates also allow a prospective borrower to borrow a larger amount because there will be a lower balance of accrued interest when the loan termination occurs (Godfrey and Malmgren, 2006).

Pursuant to HUD Mortgagee Letter No. 00-10 dated March 8, 2000, HUD now requires all interested parties in obtaining an HECM loan to attend a financial counseling session. On September 28, 2006, HUD added the requirement that an applicant's heirs (children or relatives) must also attend a financial counseling session (HUD Mortgagee Letter No. 06-25).

According to Rose (2009) the demand for these mortgages in the U.S. increased because of their use as a mechanism to supplement the income of retirees. In the U.S. and P.R. retirees depend on their savings and Social Security benefits (and pension plans if they have them) to pay their personal expenses, including their medical costs. Many retirees have seen the balance of their savings and the value of their investment portfolios shrink due to lower interest rates and bear markets. However, since 2006 the demand for this product has stabilized. Michelangeli (2008) attributes this to several factors. Retirees value their houses over consumption, have increased aversion to the risk of having to move from their residence and, as a result, reverse mortgages are very risky and an unattractive product.

In 2006 HUDꞌs Office of Policy Development and Research disclosed that the average age for borrowers of reverse mortgages is 74 years and the average loan amount is $159,000 in a house valued at $289,000, which represents 55% of the appraised value (Detwiler, 2008). A survey made by Reverse Market Insight, Inc. in 2009 revealed that 75% of reverse mortgage borrowers used 75% of the borrowed funds to pay other debts (Yeary, 2009). In March 2012 the MetLife Mature Market Institute found that the average age of reverse mortgage borrowers decreased from 76 in 2000 (77 years in 1990) to 71.5 years. This reduction is partially attributed to the reduction in housing prices, low interest rates paid on savings and the fluctuations in the stock markets. The study also revealed that the 66% of loan applicants initiated the process to reduce their debts and to meet their precarious financial situation (Elmer, 2012).

On average, 50% of reverse mortgages generated in the U.S. terminate (are cancelled) in seven years, which when you consider closing and origination costs, results in a very expensive type of financing (Hopson, Hopson y Del Vecchio, 2009).

On June 17, 2011, Bank of America and Wells Fargo & Co., two of the leading banks in the generation of reverse mortgages decided to abandon this market (Bernard, 2011). On May 2, 2012, MetLife Bank, a subsidiary of the MetLife insurance company, and the third largest bank in this type of financing announced their decision to withdraw from this segment (Carrns, 2012). 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 (Nakajima, 2012). Carrns (2012) suggests that the exit of these three banks from the reverse mortgage market will allow the entry of more efficient smaller banks.

Development and Regulation of the Reverse Mortgage Market in P.R.

As a territory of the U.S., P.R. is subject to federal laws and regulations. Commercial banks doing business in P.R. are subject to federal laws and are insured by the Federal Deposit Insurance Corporation (FDIC). The Office of the Commissioner of Financial Institutions of Puerto Rico (OCIF, by its acronym in Spanish) is the local financial regulatory entity and works closely with the FDIC and other financial institutions such as mortgage banks and credit unions.

Reverse mortgages were initially offered in P.R. in 1993, but demand for this type of financing did not pick up until 2010. OCIF started to compile statistical data for this type of loan during the first quarter of 2010. Law Number 164 dated July 29, 2011 (Consumer Protection Law of Reverse Mortgages) established the regulatory framework for financial institutions that grant this type of loans. On January 4, 2012, OCIF issued Regulation 8132 (Regulation of the Consumer Protection Law of Reverse Mortgages) to establish the rules that must be followed by all financial institutions that "provide, manage, originate, process or grant reverse mortgage loans".

Advantages and Disadvantages of Reverse Mortgages

In addition to obtaining cash by using his (her) residence as collateral, the borrower also obtains, by paying an insurance premium, protection against the possible reduction in the value of the property (Nakajima, 2012). However, a reverse mortgage could discourage savings among senior citizens. In addition, a property owner is exposed to the risk of having to move from his (her) house after having obtained the loan and having paid the loanös closing and origination costs. Nakajima (2012) also indicates that moral hazard problems could increase if the property owner fails to carry out the repair work necessary to maintain or protect the home. Hopson, Hopson and Del Vecchio (2009) also find that as a general rule, the cash received from a reverse mortgage rarely exceeds 50% of the home equity.

Research Objective

OCIF started to compile data on reverse mortgages granted in P.R. during the first quarter of 2010, whereas the starting point for the literature in the U.S. is towards the end of the 1980ös. An exploratory study by Cardona and Castro (2012) noted that, from 2010 to 2012, there has been an increase in the number of financial institutions in Puerto Rico offering reverse mortgages accompanied by a reduction in the number of loans granted and in the average loan amount during that same period.

The objective of this study is to examine reverse mortgages generated in P.R. from the first quarter of 2010 to the first quarter of 2012 and compare the results with evidence from the U.S. This study attempts to develop a comparative profile of reverse mortgages, the borrowers and volume tendencies because P.R. is affected by the same economic cycles experienced in the U.S.

Methodology

Data

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. We assigned a different number to each institution to protect their identity.

A mortgage bank in P.R. provided us with information from a sample of reverse mortgages originated during the same period as the information provided by OCIF. The information provided includes age, gender ("M / F"), marital status (married or unmarried) and geographical location of the property, origination date and loan amount, weighted average of the interest rate, closing and origination costs, amount paid to cancel the existing lien on the property (if applicable) and the net remaining cash. No borrower is directly identified since each loan is identified only by the identification number assigned by the mortgage bank.

Shan (2011) uses U.S. zip codes to identify to identify the concentration of loans by geographic area. Since we did not have available information for the propertiesô zip codes, we used the senatorial district of the municipality where the home is located using the classification criteria used by the P.R. State Elections Board. We were unable to obtain information about the motivations or reasons for the applicants to apply for the reverse mortgages or their indebtedness before applying for the loans.

The HUD Puerto Rico Field Office provided us with the information related to reverse mortgages originated in the U.S. and P.R. during the fiscal years ended on September 30, 2011 and 2010, respectively.

Consumer Credit Counseling Services of P.R. (CCCS) provided us with the number of financial counseling sessions offered to consumers interested in obtaining reverse mortgages from the first quarter of 2010 to the first quarter of 2012, which was used to measure the interest in this product and how it has changed during the aforementioned period.

With the data and information obtained we will develop an average profile of the reverse mortgage borrower and the type of approved loan. We will also present some of the averages of data and relationships between data (rates).

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Appendix

Possible impact of the proposed study over our research agenda

The objective of this investigation is to perform a comparative study of reverse mortgages in Puerto Rico and the United States. This study contributes to the household finance literature by examining the characteristics of the reverse mortgages generated by elderly consumers in Puerto Rico during their retirement stage. This study might assist regulators, counseling agencies and the government in their evaluation of the benefits of this financial instrument and the challenges and opportunities that it represents for the elderly and their relatives.

If we are given the opportunity to engage in this research, it will be one of a series of studies about reverse mortgages in Puerto Rico. The results may help develop educational tools and other financial planning studies to improve the quality of life and pay for the costs to satisfy the economic needs of retirees who now have longer life expectancies due to better health care.

Research agenda or Schedule

Activity	Dates
Literature review and data analysis	June 1, 2012 to August 31, 2012
Work on the first draft of the paper	September 1, 2012 to September 30, 2012
Present the paper in the 2013 Southern Finance Association Meeting or other academic conference	November 20-22, 2013
Submit the **first revised** draft as evidence of the research performed	By February 1, 2013
Submit paper for **publication** consideration to a peer reviewed journal such as: 1. Journal of Financial Research 2. The Financial Review 3. Financial Management Journal	By March 31, 2013