

**Reversed-Mortgage Had Been Suspended in Some US Banks since 2012 but Has
Just Gained Popularity in Taiwan, Why?
Paper for 2016 Humanistic Indigenous Innovation: Trans-disciplinary Dialogue**

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Abstract

This paper studies United States' and Taiwan ROC's policies on reverse mortgages (houses for old age annuity): date of first case, time for reaching the peak of applications, current condition, contingent exit strategy, etc. Research methods include data gathering, comparison, best practices, interviewing with key decision makers. The author also traced and studied Wells Fargo's and Bank of America's exiting strategies in 2012 as well as remedies provided to clients. The author hence provided some knowledge for ROC's Taiwan Bank and Land Bank as useful references on top of their respective current strategies. The author is particularly interested in discovering the key cross-culture differences on the two countries' respective policy-making and evolution on reverse mortgages.

Key Words: social innovation, cross-border comparison, aging and care, reverse mortgage, houses for annuities.

"HECM loans are available to borrowers aged 62 and order. A borrower's spouse may be younger than 62, but the loan terms then reflect the life expectancy of the younger co-borrower. Any existing mortgage on the house must be paid off, which can be done using HECM funds. Borrowers are required to obtain advice from a certified counselor. [Lucas, 4]"

According to Lucas in her 2015 paper entitled "Hacking Reverse Mortgages," a valuation model was developed for HECMs and was used to suggest an answer to the reverse mortgage puzzle: "why is it that a seemingly useful and subsidized product being so unpopular?" Potential contributors to low demand include distrust and lack of understanding exacerbated by the product's complexity; substantial upfront costs; limited need because of Medicaid coverage; and reluctance to spend bequests. Lucas' analysis suggested a financial explanation may be an important component of the answer: The loans are expensive for borrowers. There is a government subsidy, but the benefits are largely captured by the guaranteed private lenders. Structural changes to the program are proposed that could lower cost and improve the product's functionality and appeal [Lucas, 4, 4-5 pp.]

In Lucas' (p.5) paper, "the author developed a stochastic model of the HECM program, and used it to evaluate the purely financial costs and benefits that accrue to borrowers, the government, and private lenders. The approach differs from earlier analyses by incorporating the details of program rules into a formal valuation model, by distinguishing between the government's risk exposure and a lender's, and by generating fair value estimates of costs and benefits rather than actuarial estimates that neglect the market price of risk." [Lucas, 4, p.5]

"The results suggest a surprisingly simple explanation for the reverse mortgage puzzle that rests entirely on financial considerations. HECMs may be unpopular with borrowers because they are very expensive: The NPV of the typical HECM at origination is about "\$27,000" under our base case assumptions and on fair value basis. The NPV of the government subsidy, even with the recent tightening of program rules, averages \$4,000 per loan. The winners are the private lenders, who realize an NPV of about \$31,000 per loan. Normalizing by the size of the average line-of-credit at origination of \$145,000, the NPVs expressed as cost rates are 18.6% of principal for borrowers and 2.8% of principal for the government. The profit rate for the lender is 21.4% of principal. [Lucas, 4, p.5]

"This purely financial explanation for low reverse mortgage demand is best

understood as complement to the behavioral and other reasons that have been suggested for low demand, rather than as a substitute. For example, the costs to borrowers appear high enough so that it may be worthwhile for some adult children to help out their liquidity-constrained parents to preserve the value of bequests by avoiding the expense of the reverse mortgage. Worries about complexity and making mistakes are less likely to be put aside when a loan also appears to be quite expensive [Lucas, 4, p6.]"

"Reverse mortgage loans (RMLs) allow older homeowners to borrow against housing wealth without moving. Despite rapid growth in this market, only 1.9% of eligible homeowners had RMLs in 2013. In Nakajima's paper, the authors analyze reverse mortgage in a calibrated life-cycle model of retirement. The average welfare gain from RMLs is \$252 per homeowner, and \$1,770 per RML borrower. Bequest motives, uncertainty about health and expenses, and loan costs amount for low demand. According to the model, the Great Recession's impact differs across age, income and wealth distribution, resulting in a threefold increase in RML demand for lowest-income and oldest households." [Nakajima, 5]

A life-cycle may be defined as follows for a female as follows:

Age 26: start to work for 40 years, get married, buy a house, have the first kid; Age 29: have the second kid; Age 32: have the third kid; Age 62: apply for reverse mortgage loan for a period of 30 years; Age 66: cease to work and retire; Age 92: Deceased.

"Merton has been optimistic about the promise of reverse mortgages. He said that belief is an outgrowth of the field of growth theory, for which the economist Robert Solow won a Nobel Prize. Solow showed that economic growth is not driven by population growth or high rates of saving, but by technological progress. Technology allows us to get more from labor and capital." [Huebscher, 3, p.2]

"One of the biggest global issues is how to fund retirement," Merton said. "It is faced by every country - large and small." [Huebscher, 3, p.3]

"The good news is we are living longer and having longer active lives, Merton said. This is thanks to improvements in nutrition and medical science. The distribution of those benefits is not equal, he added, since the wealthy get a disproportionate share of those benefits." [Huebscher, 3, p.3]

"Technology makes a solution possible, he said, and reverse mortgages are an important way that financial innovation can solve problems on a global basis."
[Huebscher, 3, p. 3]

"The bad news, according to Merton, is that we must pay for our consumption while we work and during retirement. The implication of longevity means that we go from a 40-year working career and a 10-year retirement to a 40-year career and a 20-year retirement. The implication, approximately speaking, is that we must save 33% of our working earnings for retirement instead of 20%. Without reverse mortgages, the alternative, Merton said, is to reduce consumption or work longer [Huebscher, 3, p.3.]

"However, Merton said, "reverse mortgage" is a terrible name. In Korea, he said, it is called a home pension. It is a practical way to use one's house as a more efficient way to save for retirement." [Huebscher, 3, p.3.]

"Critically, Merton said, reverse mortgages are non-recourse loans. If the value of the house is less than the principal due at the time the owners move out, then there is no recourse." [Huebscher, 3, p.3.]

"In this sense, reverse mortgages are designed differently than traditional mortgage loans. Borrowers shouldn't care about the rate of interest they will pay; their goal should be to maximize the amount of principal loaned." [Huebscher, 3, p.3.] The advice is to obtain yearly annuity and not a lump-sum.

"Also, Merton said a challenge remains in what one does when they get the principal." "If you spend it," he said, "it defeats the purpose." [Huebscher, 3, p.4.]

"One criticism of reverse mortgages is that it deprives one's children of a bequest of the remaining value of the house. Merton's response was that the potential for a bequest still exists with a reverse mortgage. It becomes more like a "lottery ticket" that is won under the most adverse circumstances (when one's parents die). The children or heirs get a put option on the value of the house at the time of sale, to the extent that value exceeds the amount due on the reverse mortgage."

"More broadly, though, Merton said retirees should place maintaining their own standard of living ahead of leaving a bequest. He said it is similar to the warning that airline attendants give with regard to the use of oxygen masks. They say to place the mask over your own mouth before that of your children." [Huebscher, 3, p.4.]

"The Federal Housing Administration (FHA) today ("as of June 12, 2015") issued a revised policy under its Home Equity Conversion Mortgage (HECM) Program giving FHA-approved lenders expanded options to allow eligible 'non-borrowing spouses' the potential to remain in their home following the death of the last surviving borrower. [Castro, 2, p1.]

A HORROR STORY OF REVERSE MORTGAGE APPLICANT

Charles, the husband of Karen, had taken out a reverse mortgage in 2008 at an age of 65, of an amount of \$20,000 to do repairs on their home. Karen was 60 and was two years too young to qualify for the loan.

Karen's husband died of a stroke in May 2014. Ten days later, she got a letter from a loan servicing company saying she'd have to pay off the reverse mortgage on her home or it would go into foreclosure.

AN U.S. GOVERNMENT TIMELY REMEDY (AS OF June 12, 2015)

The protections for non-borrowing spouses were extended to loans made before August 4, 2014.

With the help of an independent reverse mortgage consumer advocate, Karen the widow was able stall the foreclosure until the new spousal guidelines were in place. "The new law was a lifesaver in the surviving widow's situation," the specialist says. "Karen the widow would have lost her home if it weren't for this change."

A SAFER APPLICATION OF REVERSE MORTGAGE

Kumano, 71, has no debt, and his home is paid off. He qualified for a loan of half of the size of the appraised amount; and set it up as a line of credit. "It's mainly for emergencies." Having those funds available also means that if he needs cash, he doesn't have to take more than the minimum he is required to take from his retirement accounts, which increases his taxable income. "This money from the house is tax-free."

TOUGHER NEW RULES

The new rules include:

1. Tougher borrowing limits.
2. Stricter financial requirements.
3. Stronger spousal protection.

Erroneous statements and corrections of reverse mortgage advertisements:

1. A reverse mortgage does not guarantee financial security for the rest of your life.
2. You don't receive the full value of loan. The face amount will be slashed by higher-than-average closing costs, origination fees, upfront mortgage insurance, appraisal fees and servicing fees over the life of the mortgage. In addition, the interest rate you pay is generally higher than for a traditional mortgage.
3. Interest is added to the balance you owe each month. That means the amount you owe grows as the interest on your loan adds up over time. And the interest is tax-deductible until the loan is paid off.
4. You still have to pay property taxes, insurance, utilities, fuel, maintenance, and other expenses. If you don't pay your property taxes, keep homeowner's insurance or maintain your home in good condition, you can trigger a loan default and might lose your home to foreclosure.
5. Reverse mortgage can use up all the equity in your home, leaving fewer assets for you and your heirs. Borrowing too soon can leave you without resources later in life.
6. Generally you don't have to pay back the money as long as you remain in your home. But when you die, sell your home or moves out, you, your spouse or your estate, i.e., your children, must repay the loan. Doing that might mean selling the home to have enough money to pay the accrued interest.

REVERSE MORTGAGES: CONSUMER REPORTS INVESTIGATES

1. Reverse mortgages can be valuable as a last resort for seniors who want to stay in their homes and have significant equity but need money to supplement income or banish an existing mortgage payment. With a reverse mortgage, they can trade some of that equity for a lump sum and monthly payouts.
2. But those loans can be terrible for customers who don't understand the complicated rules governing them and how quickly high fees and interest charges can balloon. They can end up stranded in their homes without any remaining equity to cover unexpected costs later in life.
3. Use of the loans is exploding as lenders--who shoulder almost no risks--push them to the growing ranks of retired baby boomers, especially for spending on vacations, new cars, and more.
4. Lawmakers and regulators are getting worried. "The people who are making these loans and advertising them so heavily to seniors on cable TV get the rewards but escape the risks that come with them. It's going to be the sequel to the

subprime-mortgage mess," says Sen. Claire McCaskill, who is pushing for reverse-mortgage industry reforms.

Recent Facts of Reverse Mortgages

1. Taxpayers are being tapped to subsidize reverse mortgages for the first time. Usually, insurance premiums paid by borrowers have covered bailouts of mortgages by the fund. The payouts to lenders occur under certain circumstances, such as when the eventual sale of a borrower's home doesn't cover the money owed on the loan. Now the Department of Housing and Urban Development says that \$798 million in taxpayer money must be budgeted in the next fiscal year to cover potential losses that won't be covered by the premiums.
2. Unsuspecting borrowers have become cash cows for lenders and others who encourage them to use their mortgage proceeds to buy financial products such as deferred annuities that can be inappropriate for their situation. And the required counseling for the mortgages can be far too skimpy.

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ROBERT MERTON'S VIEW ON REVERSE MORTGAGE

"One of the biggest global issues is how to fund retirement," Merton said. "It is faced by every country--large and small. [Huebscher, 3]

The good news is we are living longer and having longer active lives, Merton said. This is thanks to improvements in nutrition and medical science.

The bad news, according to Merton, is that we must pay for our consumption while we work and during retirement. The implication of longevity means that we go from a 40-year working career and a 10-year retirement to a 40-year career and a 20-year retirement. The implication, approximately speaking, is that we must save 33% of our working earnings for retirement instead of 20%. Without reverse mortgages, the alternative, Merton said, is to reduce consumption or work longer.

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In this sense, reverse mortgages are designed differently than traditional mortgage loans. Borrowers shouldn't care about the rate of interest they will pay; their goal should be to maximize the amount of principal loaned.

DEMOGRAPHICS AND NORMS IN TAIWAN FOR REVERSE MORTGAGES

Taiwan's Reverse Mortgage has prospered just recently from advocating of a group of bankers such as the previous CEO of the Bank of Taiwan. Taiwan's house owning rates are very high since house is a single most important asset for most Taiwanese. However, the salary for positions for most governmental and service sectors had been stagnant for decades. Most importantly the government is currently working on pension fund revolution which will cause most of the retirees losing some of their planned pension income after retirement. Hence the author fully supports the idea of promoting the reverse mortgage in Taiwan.

However, Taiwan's intergenerational financial planning and frugality traditions are different from these of United States. And the market may be much smaller than what were expected. The major differences are the overwhelming preference of estate bequests from parents to children and the financial feedback from children to aging parents. That is, Taiwan and other Chinese-origin countries have long been doing overlapping generational financial planning, instead of single-generational financial planning. In reverse mortgage jargons, children had long been acting as the bankers who promote the practice. According to the new advice from United States remote mortgage advocators, children should pay living allowances to aging parents so that aging parents may reduce the amount of money they apply from the bank promoting the reverse mortgage loans, and hence reduce the rates of defaults and the probability of losing their houses to bankers.

However, the norms of intergenerational cooperation had been changed gradually to the American style due to demographic shifts and richer-daddy-yet-poorer-kids

phenomena due to the stagnant salary for younger generation, as compared to the salary of the baby-boomer generation. The capability of providing financial feedback to parents from the children has been attritioned generation by generation in Taiwan. It's popular to see elder parents keep helping their adult children paying housing and grandchildren's educational expenses in Taiwan. However the house may become the last resorts when the elder parents have become really aged. Therefore reverse mortgage is still worth promoting for its applicability.

However the author had detected the vulnerability of reverse mortgage in Taiwan. The financial service protection acts didn't seem to be so well developed in Taiwan, as in United States. That is, the remedy for market failure is not always made readily available in Taiwan, as well as in other emerging economies. Since the starting of the reverse mortgage, there had many unfortunate cases requiring remedies from the government. And Obama administration responded very shortly with the spirits of protecting the disadvantaged as designed in the Financial Services Protection Acts. Among all imperfections, the ultimate one is the unexpected death of the elder one in a couple who sign the reverse mortgage contact with the bank. And the expelling notice of the surviving widow in 30 days since the death of the deceased. The prevailing reason is that the widow had trouble repaying a loan which was as little as 20,000 during the most financially dismal period of losing and burying one's husband. Even though this is exactly the opposite of what is said in the banks advertisement. United States responded immediately when the government had discovered the discrepancy between reality and promotion. An act was appended to the original rule of reverse mortgage loan to allow the spouse of the deceased to stay in the house until she no longer needs one.

SUMMARY: POTENTIAL SHORTAGES OF REMEDY FOR IMPENDING MARKET FAILURE IN TAIWAN

THE ISSUE OF WIDOW'S RIGHTS AT THE DEATH OF THE REVERSE MORTGAGE APPLICANT

A key issue for reverse mortgage is uneven life of the elderly couple. The old rule requires that immediately following the death of the reverse mortgage loan applicant, the loan should be repayed or the house should be auctioned immediately to return the borrowing to the lending bank. Usually the elder of the couple will reached the age of 62 first, and an action will cause the aged survivor to be ousted from the house.

The Obama administration provided remedy to this thorny issue, urging the lending

bank allow the survivor to continue to stay in the house if the survivor is capable of paying real estate tax and the estate insurance fees. This is nice in terms of protecting the occupants. However it might have caused some major players, such as Bank of America and Wells Fargo bank to withdraw from the reverse-mortgage provision as a result, in as early as 2011.

This remedy has the following consequences: extends the length of the reverse mortgage loan from {applicant's death age – applicant's loan originating age (usually 62)} to the {the survivor's death age - the survivor's age at the time of loan origination}. The consequence of the extended length of the reverse mortgage loan is normally unwanted by the lending bank, even though the terminal value of the house is usually higher after an extended period of time. If the house is auctioned by the bank, it is usually auction away at a much lower price than the market value. "HECM's are no-recourse loans, collateralized by the borrower's home and guaranteed against default by the government. The loans come due when the borrower dies or permanently moves. [Lucas, 4]"

DETAILED QUESTIONNAIRE AS A DECISION AIDE

One important change Consumer Reports advocates is a requirement for seniors to fill out a detailed questionnaire walking them through the loan's possible consequences before filling out a mortgage application. The worksheet, which Consumer Reports helped design with a neurology professor who studies decision-making in older adults, is mandatory in California.

The above decision aide is lacking in Taiwan.

POTENTIAL DEFICIENCY OF REMEDY READINESS IN TAIWAN

According to the author's interview with the Bank of Taiwan, Taiwan had not confronted such cases and Bank had not prepared for such needs. If such needs arise in one day, U.S. experiences will worth referencing. Government will have to watch the development of any financial innovation and be prepared to provide remedies when needed.

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