

Reverse Mortgage: An Empirical Study in Indian Perspective

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Abstract

Reverse mortgage as an innovative financial product enables senior citizens to mortgage their house property with a lender and convert part of the home equity into tax-free income without having to sell the house. Despite growth in this market and the expected popularity of the concept, the results are not satisfactory in India. The present study tries to explore various factors affecting the choice of potential buyers of Reverse Mortgage Loan in India. It tends to establish the linkage between demographic variables and their effect on attitude towards reverse mortgage. The analysis resulted in extraction of five factors using factor analysis technique, namely, Financial Independence, Revenue returns, Risk involvement, Complex Structure and Ownership.

Keyword: Reverse Mortgage, Retirement Planning, India, Financial Independence

1. Introduction

In a country like India, owning a home is one of the most cherished dreams for every individual. Being a home owner, most of the people feel pride in the young age and protected in the old age. It is also a very big concern that after investing in home, most of the people have not much liquid amount left in their pocket for old age expenses. And when unforeseen future contingencies involving huge outlay of funds arise, it is generally the least priority to sell the house property. In order to help people in generating a regular income at the time most

needed, i.e. during old age, and for providing financial security to them, the concept of Reverse Mortgage has been introduced. Though this concept is very popular in United States and United Kingdom (US/UK), the concept has started gaining popularity in India in recent times. In the budget of 2007–08, the finance minister of India introduced this concept of Reverse mortgage. The NHB (National Housing Bank), a subsidiary of Reserve Bank of India (RBI), had been assigned the responsibility of preparing the regulations for the same. This innovative scheme aims at enabling senior citizens to fetch value out of their house property without a need for selling it.

As the name indicates, a reverse mortgage is a mortgage ‘in reverse’. Under a normal mortgage, the home buyer i.e. the borrower obtains a loan to acquire a property or to finance his home. Under a reverse mortgage, the owner of a house property surrenders the title of his property to a lender and raises money.

Reverse mortgage is a financial product that enables senior citizens (60 +) who own a house to mortgage their property with a lender and convert part of the home equity into tax free income (exemption limit) without having to sell the house.

Instead of you making monthly payments to a lender, as with a regular loan, the lender makes payments to you. Maximum period of loan is of twenty years. The loan is not required to be serviced as long as the borrower is alive and in occupation of the property. On the borrower’s death, the loan is repaid through sale of property, which is a demerit of this scheme related to the perception of the house owner. This seems to be the greatest disqualification

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to become a popular scheme in India since every well being Indian seeks to die a socially honored death and leaving his property free from any trouble at the time of his / her death for the children.

Qualifications for reverse mortgage eligibility:

- ⇒ Should be a Senior Citizen of India above 62 Years of age.
- ⇒ Married Couples will be eligible as joint borrowers provided one of them being above 60 years of age and other not below 55 years of age.

Reverse mortgage aims at partially meeting the financial needs of senior citizens without selling the property and enables recurring funds inflows to the senior citizens during their life time. After the death of the senior citizen, the surviving spouse can continue to occupy the property till his/her demise. It acts as a source of income for the cash deprived individuals.

2. Review of Literature

As per the reports of NHB, till 2013, reverse mortgage loans worth Rs. 1,800 crores have been sanctioned and loans worth Rs. 800 crores have already been disbursed after this scheme got introduced (Ghosh, 2013). Despite the expected popularity and usability of this concept, only a few research studies have been conducted. The present research tried to look into the findings of following already conducted researches on reverse mortgage.

Rajagopalan (2006) tried to explore the prospects for reverse mortgage (RM) products in India, even before the concept of reverse mortgage was even introduced. He suggested that Reverse mortgage, if available, would offer an attractive option to the elderly to finance their consumption needs on their own, without the necessity of moving out or worrying about indebtedness or repayment. He cautioned the prospective lenders to take few necessary steps before a pilot RM product could be introduced, that included assessment of potential demand in a limited geographical area, precise assessment of related legal, taxation and regulatory issues and exploratory financial modeling to assess lender risk and options for managing it.

Srinivasan (2008) discussed the pros and cons of this emerging product. The scope of the paper was to provide

an overall evaluation of reverse mortgage from the economic and social viewpoint. The negative factors and tax implications have also been discussed. Various reasons for the indifferent attitudes of the customers have been described. He concluded that Reverse Mortgage can serve as a boon to retirees as it can serve the purpose of a supplementary source of income for retirees. He suggested that for the better appeal of the product among senior citizens, a lot has to be bestowed on the designing of this product.

Kumar, Divakaruni & Madhukar (2008) highlighted the important features of Reverse Mortgage and the lender's risks involved in this. They identified a few potential target segments to enhance marketability of the reverse mortgage products in India and suggested to conduct a survey to assess its potential in different geographies like Metros, Urban and Semi-urban areas. They opined that for better marketability, the survey results could be utilized to design new Reverse Mortgage products.

According to Kang (2010), there has been a growing popularity of reverse mortgages among senior citizens who need cash. The paper describes the mechanics of reverse mortgage loan, its benefits, drawbacks and the costs (financing cost, closing cost, a mortgage insurance premium (MIP), a servicing fee, and interest) included. The paper concluded that in case of the death of the borrower, or when the borrower moves to another home within a few years after getting the loan, the loan can be very expensive in terms of high financing costs.

Michelangeli (2010) argued that elderly people in America are considering reverse mortgages as a way to relieve their financial pressures. He collected data on single households from the Health and Retirement Study (HRS) to study the expected economic gains or losses associated with reverse mortgages. Contrary to the popular belief that reverse mortgages are beneficial for the senior citizens, using a combination of four state-of-the-art mathematical programming tools, the study concluded that reverse mortgages are likely to impose large losses on house-rich but cash-poor households. For such households, taking out the standard reverse mortgage and borrowing the maximum amount permitted reduces expected utility, on average, to the same degree as a 14 percent loss in financial wealth. During the last one decade, there has been a significant demographic change in India's population due to globalization and

improved medical facility and lifestyle. As on 2009, the population of people above 60 yrs is estimated to be at 90 million, i.e. around 8% of total population. According to United Nations, it is estimated that by the end of 2050, the population of people aged more than 60 years will be around 20 percent of total population. With the changing scenario, promoting the reverse mortgage scheme would be a change in the mindset of senior citizens, as the property inheritance is deep rooted and it will be hard to adopt the collateral culture in financing the retired life of senior citizens (Suresha and Naidu, 2012). Venkatraman and Mishra (2013) provided in-depth information on the reverse mortgage scheme and banks offering it. This helped in understanding the importance of Reverse Mortgage Scheme in Indian context. They also tried to point out that why this golden plan is not getting popular in India.

Nakajima and Telyukova (2014) analyzed reverse mortgages in a calibrated life-cycle model of retirement. They found that average welfare gain from Reverse Mortgage Loan is \$885 per homeowner. Their model implied that low-income, low-wealth and poor-health households benefit the most, consistent with empirical evidence.

India is experiencing a demographic shift with an aging of the population due to increased longevity rates. For many older Indian households, their largest single asset is their primary place of residence (Daptardar & Dasgupta, 2014). The authors focused on somewhat overlooked area that affects a growing section of society and examined various factors influencing reverse mortgages, both on the demand and supply sides. They tried to understand the financial needs of older Indian and to what extent reverse mortgages adequately address their needs.

The perusal of the literature revealed that though a number of articles have been written on reverse mortgage yet a very few research studies have been conducted to provide empirical evidence to the statements made in the research articles. This study makes an attempt to explore various factors affecting the choice of potential buyers of Reverse Mortgage Loan in Indian setting.

3. Objectives and Research Methodology

This study involves Descriptive Research involving gathering of primary data. This design was considered the most appropriate and helpful in determining the perception of respondents on the variables which were studied (Gay, 1992; Newman, 2003). The study primarily aims at measuring the attitude of Potential Buyers towards reverse mortgage and further determining various factors affecting the attitude of potential buyers towards reverse mortgage.

A structured questionnaire containing 16 statements measured on a 5-point Likert scale ranging from 'strongly agree' to 'strongly disagree' was developed. The different statements were generated based on literature survey in an iterative manner. The questionnaire used for the sample survey was a structured and non-disguised questionnaire and consisted of two major sections. The first section intended to capture the demographic profile of the respondent, the second part was concerned with the variables of reverse mortgage.

The sample was selected using non-probability convenience sampling technique for the current research. The sampling criterion included the inclusion of the persons above the age of 40. The study assumed them to be the potential users (people aged above 40 as they start thinking about their retirement planning options). A total of 111 respondents from the Ghaziabad district of Uttar Pradesh were finally included for further analysis.

Data analysis has been done using SPSS 16.0. The data reduction technique i.e. Factor Analysis has been used to identify the factors affecting the attitude of buyers towards Reverse Mortgage.

4. Analysis and Results

The analysis of data has been conducted in three phases. In the first phase, the demographic profile of respondents has been analyzed. Second phase of the analysis included the data reduction using factor analysis and third phase involved testing of hypothesis using ANOVA.

4.1 Demographic Profile

Table 1: An Overview of Respondents Demographic Profile

Age			
	Frequency	Percent	Cumulative Percent
41–50 yrs	41	36.9	36.9
51–60 yrs	60	54.1	91.0
61–70 yrs	10	9.0	100.0
Gender			
Male	68	61.3	61.3
Female	43	38.7	100.0
Educational Qualification			
UG	4	3.6	3.6
Grad	49	44.1	47.7
PG	58	52.3	100.0
Income			
Below 5 lacs	12	11.1	11.1
5–10 lacs	63	58.3	69.4
10–15 lacs	23	21.3	90.7
Above 15 lacs	10	9.3	100.0

From the Table 1, it is observed that majority of the respondents, i.e. 54.1% are in the age group of 51–60 years of age, 36.9% in the age group of 41–50 yrs and 9% from the age group of 61–70 yrs. Gender-wise, 61.3% of the respondents were male, and 38.7 % were female. Income-wise 58.3% were having 5–10 lacs, 21.3% were having 10–15 lacs, 11.1% were having below 5 lacs and 9.3% were having above 15 lacs. There were 52.3% having Post Graduate qualification and 44.1% were Graduates.

Factor Analysis

Reliability Test: The reliability of the data was tested using Cronbach alpha, which came out to be .708 for for the 16 items scale which indicates high reliability of data (Table 2).

Table 2: Reliability Statistics

Cronbach's Alpha	N of Items
.708	16

Factor Analysis

Factor analysis was applied to analyse the factors that affect the attitude of buyers towards reverse Mortgage. To test the data appropriateness for factor analysis the “KMO and Bartlett’s Test” was applied. A high value of KMO (between 0.5 and 1.0) suggests that the data is adequate for factor analysis. In this case the value was .659 which is greater than 0.5 and hence it proves the adequacy of data for Factor analysis (Table 3).

H0: There is no significant relationship between the variables in the population.

H1: There is a significant relationship between the variables in the population.

In order to test the null hypothesis, Bartlett’s Test of Sphericity was applied which showed that the significance value was 0.000 which is less than the 0.05, hence the null hypothesis (H0) was rejected, approx chi-square value is 740.984 which is adequate and hence it can be concluded that there is a significant relationship between the variables in the population or in other words the variables are correlated with each other. This testified that the sample was appropriate for factor analysis. Bartlett’s Test of Sphericity is very significant; it indicates the acceptance of the components in the questionnaire.

Table 3: KMO and Bartlett’s Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.659
Bartlett’s Test of Sphericity	Approx. Chi-Square	740.984
	df	120
	Sig.	.000

According to the above mentioned methodological notes, Factor analysis was performed to identify the key dimensions affecting attitude of buyers. Factor analysis with principal component by Varimax rotation was performed, which revealed five factors. The five factors explained 70.122% of the total variance. All factors’ factor loadings and variance values can be seen in Table 4 and 5.

Table 4: Total Variance Explained

Total	Initial Eigen values		Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
3.804	23.773	23.773	3.804	23.773	23.773	3.525	22.034	22.034
2.251	14.069	37.842	2.251	14.069	37.842	2.135	13.343	35.377
2.021	12.633	50.475	2.021	12.633	50.475	2.067	12.921	48.298
1.785	11.159	61.634	1.785	11.159	61.634	1.935	12.095	60.393
1.358	8.488	70.122	1.358	8.488	70.122	1.557	9.729	70.122
.991	6.197	76.319						
.647	4.045	80.364						
.586	3.661	84.026						
.517	3.232	87.257						
.464	2.899	90.156						
.441	2.759	92.915						
.359	2.242	95.158						
.242	1.514	96.672						
.203	1.271	97.943						
.176	1.101	99.044						
.153	.956	100.000						

Extraction Method: Principal Component Analysis.

Table 5: Rotated Component Matrixa

	Component				
	1	2	3	4	5
It helps the elderly people to stay independent when it comes to their self respect	.861				
Despite objections by Children, it helps them to be self-dependent	.824				
Reverse Mortgage allows elderly people to earn regularly without being dependent on others	.788				
Bank does not retain the home even if one of the member dies and the other one is still living in that particular home	.716				
The overall formalities of Reverse Mortgage are easily fulfilled by the elderly.	.703				
A reverse mortgage allows you to withdraw wealth invested in your home.		.727			
Reverse mortgage saves your income tax		.726			
A Reverse Mortgage is an excellent financial planning tool for older homeowners to supplement their retirement income		.589			
Various types of risks and high fees in reverse mortgage are one of the reasons for not getting success.			.816		
It creates problem for old age people to retain their home once mortgaged with the bank			.685		
Lack of awareness has been one of the reasons for the poor response by senior citizens for the reverse mortgage products.			.645		
Reverse Mortgage is very expensive loan option.				.797	
Reverse mortgages are complex products and difficult for consumers to understand.				.746	
People do not prefer reverse mortgage because their memories are attached with their homes				.666	
Even when Reverse mortgage loan balance becomes larger than the home value; you do not have to move out.					.755
Reverse mortgage gives the homeowners to keep titles to their homes until they pass away, move, sell their home or reach the end of their loan term.					.713

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Five factors found have been named as: 1) Financial Independence, 2) Revenue Returns, 3) Risk Involvement, 4) Complex Structure and 5) Ownership

Table 6: Factor Matrix

S. No.	Statements	Factor Name	Factor Loadings
1.	It helps the elderly people to stay independent when it comes to their self respect	Financial Independence	.861
2.	Despite objections by Children, it helps them to be self-dependent		.824
3.	Reverse Mortgage allows elderly people to earn regularly without being dependent on others		.788
4.	Bank does not retain the home even if one of the member dies and the other one is still living in that particular home		.716
5.	The overall formalities of Reverse Mortgage are easily fulfilled by the elderly.		.703
6.	A reverse mortgage allows you to withdraw wealth invested in your home.	Revenue Returns	.727
7.	Reverse mortgage saves your income tax		.726
8.	A Reverse Mortgage is an excellent financial planning tool for older homeowners to supplement their retirement income		.589
9.	Various types of risks and high fees in reverse mortgage are one of the reasons for not getting success.	Risk Involvement	.816
10.	It creates problem for old age people to retain their home once mortgaged with the bank		.685
11.	Lack of awareness results in poor response by senior citizens for the reverse mortgage products.		.645

S. No.	Statements	Factor Name	Factor Loadings
12.	Reverse Mortgage is very expensive loan option.	Complex Structure	.797
13.	Reverse mortgages are complex products and difficult for consumers to understand.		.746
14.	People do not prefer reverse mortgage because their memories are attached with their homes		.666
15.	Even when Reverse mortgage loan balance becomes larger than the home value; you do not have to move out.	Ownership	.755
16.	Reverse mortgage gives the homeowners to keep titles to their homes until they pass away, move, sell their home or reach the end of their loan term.		.713

Factor 1- Financial Independence: In the study it is observed that the first and most important factor determining the effectiveness of Reverse Mortgage. It allows a regular income to the elderly people which helps them improve quality of their life with being self dependent.

Factor 2- Revenue Returns: Another Factor, Revenue return confirmed that reverse mortgage is an excellent financial option not only for their retirements but also for saving income taxes.

Factor 3- Risk Involvement: Buyers find that reverse mortgage is a risky proposition in terms of their understanding of the product.

Factor 4- Complex Structure: The study shows that buyers viewed it as a costly affair and find difficulty in understanding its features. This negatively affects the potential buyers to go for reverse mortgage

Factor 5- Ownership: Last factor emphasizes that the bank may promote this aspect of retention of ownership while using their home and enjoying the benefits as well.

5. Conclusion

Reverse mortgage, though the concept is not even a decade old, is not getting the requisite popularity in India. The study probed into various factors that affect its usage amongst the potential users. In total, five factors that affect the attitude of potential buyers towards reverse mortgage have been identified i.e. Financial Independence, Revenue Returns, Risk Involvement, Complex Structure and Ownership. While the banks should promote this product by emphasizing on the factors like financial independence, revenue returns and ability to maintain the ownership, they should work upon the factor like complex structure and risk involvement. The advertisements and awareness campaigns should focus on these areas for increasing the popularity of the product.

The use of reverse mortgage is an important topic and is worthy of further investigation. This study is a nascent attempt to explore various factors affecting the attitude of potential buyers of this product. This research has been limited to develop better understanding of retirement decisions in India with a small sample of respondents from Ghaziabad district only. A more detailed evaluation of the growth factors including the impact of taxation on household decisions is recommended, that too on a Nation-wide context. The scope of the study may be enhanced to further include a state-wise comparison amongst users' perception. Also, the economic investigation of drivers impacting both the demand and supply side of these loans would be of interest.

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