



## REVERSE MORTGAGE IN NCR - AN EMPIRICAL STUDY IN NCR

SUPRIYA SEHGAL, VAISHALI DHINGRA and MD. ABU BAKKARM

JK Business School  
Gurugram, Haryana  
E-mail: f16supriya@iima.ac.in

Teerthanker Mahaveer University  
Moradabad, India  
E-mail: vaishalidhingra.vd@gmail.com

Bajaj Finance, India  
E-mail: bakkarabu1722@gmail.com

### Abstract

Reverse Mortgage is mortgage instrument which helps elderly convert their housing equity into cash to fund their retirement expenses. Reverse Mortgage as a concept had developed in Europe over two hundred years ago which then slowly evolved into the modern reverse mortgage instrument. It was introduced in USA in the year 1988 in the form of Home Equity Conversion Mortgage (HECM), a non recourse loan. It was later introduced in other countries including but not limited to Canada, Australia, Hong Kong. It was introduced in India in 2007. It has got a mixed response everywhere being a “complex” and “confusing” among other factors. Reverse Mortgage loans did not take many takers in India. Despite the large size of market it failed to garner the success if was expected to. This paper explores the factors affecting demand and supply side of reverse mortgage and see how future demand for Reverse Mortgage Loans can be generated.

### Introduction

The worldwide market for Old Age Social and Income Security (OASIS) items are anticipated to develop significantly and India is no special case. Characterized advantage plans, both freely and secretly subsidized, are confronting numerous dangers and their feasibility is under risk. This has provoked the improvement of numerous items for sharing such dangers,

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with unadulterated characterized commitment designs at one extraordinary. Truth be told, the Government of India (GOI) has moved its entire ongoing enlisted people to such a characterized commitment plan. Be that as it may, characterized commitment designs convert just the budgetary investment funds amid working age into salary streams in maturity.

To the degree reserve funds amid working age is secured up house property, it can't be en-gotten the money for seniority needs with the exception of through moving and/or moving out. This would be the situation regardless of whether customary advances were taken against house property, as they must be reimbursed, either through portions or on development. This is the place where Reverse Mortgage (RM) has a potential market: as an instrument to change over value in a house property into a salary stream, with no obligation overhauling or moving stresses.

This paper describes the reverse mortgage in India and the different types of risks related to reverse mortgage from demand side and supply side. Reverse mortgage is something that is very new for developing countries. Before coming to India in 2008, reverse mortgage was only available in developed countries like Europe, Japan, United States of America, Great Britain etc.

Generally, RM is the 'switch' of a regular home loan advance.

In a customary home loan advance, the borrower begins with a vast advance and low value in his home. As he pays his ordinary home loan portions, he decreases his remarkable credit sum and expands his home value.

Interestingly, a RM borrower begins with a high value in his home. The moneylender expands a non-response advance anchored by the house property. The borrower may get the returns through

- A singular amount toward the start
- Regularly scheduled instalments till a settled term or a deep rooted annuity
- Setting up an acknowledge line for or without collection of enthusiasm using a loan balance

- A mix of the above mentioned

The borrower is not required to move out of the house or make any instalment to the bank, as long he is alive and is living in the house or does not move out. Along these lines the credit and intrigue amasses till development. There is no credit or pay prerequisite to be fulfilled. Regardless of whether the collected credit and intrigue goes over the feasible estimation of the house at transfer, the reimbursement is topped at that esteem as it were. Thus RM is an instance of raising obligation, falling value.

Naturally, the measure of credit will be an element of

- Age of the borrower and any co-candidate (future/mortality dangers)
- The current estimation of the property and expected property gratefulness rate (land showcase hazard)
- The current loan cost and financing cost instability (loan fee hazard)
- Conclusion and adjusting costs
- Explicit highlights picked: settled or skimming premium; shared gratefulness; enthusiasm gaining credit-line; and home loan protection.

There is reasonably nothing in the graduated house buyback thought to confine it to just the elderly. Be that as it may, the item is especially suited for elderly individuals: truth be told, the more established a man is, the more appealing RM is. Why?

- RM requires close aggregate value responsibility for house-more probable for a very long time over 50 (except if the property is acquired)
- It is appealing to just individuals with deficient current pay and minimal monetary investment funds by suggestion, retired people
- For a given property estimation, the lower the future (more established the individual is), higher is the extra pay through a RM.
- Open strategy bolster including charge impetuses is more probable if the borrowers are the elderly.
- The elderly are especially liable to join huge mental/enthusiastic/wistful incentive to 'maturing set up' without moving

out. Actually, the more they have remained in their current home, the more important this is probably going to be, considering the advantages of a recognizable neighbourhood.

It is accounted for that as far as 400 years prior, European financial specialists acquired homes from elderly people and enabled them to remain in the same house lease free for whatever is left of their lives. Home-inversion was made in U.K amid the Great Depression of 1929. Comparable courses of action called “viagres” were accessible in France. The idea was in this way brought into U. S, where it has created and advanced the most, both in assortment and volumes.

RM incorporates a scope of non-plan of action contract advances, which enable a borrower to get fluid assets against his home value, without moving out or making any reimbursements, till he passes on or moves the house or moves out. Since greater part of the funds at retirement is regularly secured home value, RM is an incredible gadget to expand the earnings of the elderly. RM has been in presence in Europe for a few centuries however in very confined and customized settings.

The maximum loan amount that the property holder can acquire depends straightforwardly on three factors:

1. The estimation of the home;
2. The expected normal home loan financing cost;
3. The age of the borrower.

The estimation of the house influences the maximum loan amount legitimately: the higher the estimation of the house, the bigger the advance the borrower can take. Note that the house's estimation that is significant is the normal estimation of the house when the advance will be reimbursed. Accordingly, its esteem is a desire and is likewise alluded to as “assessed esteem”. Besides, there are breaking points to the measure of cash that can be obtained, and this relies upon a nation's guideline. For example, in the USA, the estimation of the home utilized in registering the credit sum can't surpass the Federal Housing Administration's (FHA) protection limit, which right now is set to up \$625,000. Along these lines, mortgage holders with property estimations that surpass as far as possible are obliged, as

independent of the estimation of their properties; the most extreme sum obtained will be fixed. In a similar vein, Italy's guideline puts a breaking point to the advance, which can be up to €450,000. Additionally, nation explicit guidelines likewise decide the base advance sum. For example, in Italy the base is set to €32,000.

The manner by which the Reverse Mortgage works, suggests that the borrower will confront an intrigue trouble each year until the advance is reimbursed. Specifically, intrigue instalments are summed up to the advance central after some time and are to be paid together with the foremost when the obligation is smothered. Subsequently, in characterizing the measure of the advance, intrigue instalments will be thought about. Therefore, it pursues that higher loan fees decreases the measure of cash obtained.

The age of the borrower is significant since it impacts the time allotment that will be required for the advance to be paid back, which thus decides the intrigue instalments. All the more explicitly, the future at the age in which the Reverse Mortgage is embraced is pertinent, as this will decide the intrigue trouble. Along these lines, more youthful borrowers on desire will get the advance for a more drawn out timeframe, in this manner making the intrigue trouble higher thus the estimation of the advance will be lower. Besides, guideline regularly decides the base age at which the Reverse Mortgage can be advertised. In the United States the base age is 62 years, while in Italy, it was as of late brought from 65 down to 60 years old.

Reverse Mortgage has been implemented mainly in developed countries it started from Europe then in Great Britain and the most latest is in United States of America but for the first time it is coming in the developing country like India.

Reverse Mortgage has come to India in the year 2008 but only 10,000 approx. reverse mortgages have been opted so far. So, companies who bring reverse mortgage in India haven't developed the reverse mortgage in such a manner that it can grab the estimated market.

According to the study, the reverse mortgage industry will be of 5000 crore in the year 2021. But to achieve such a huge market, Companies have to know about what are the problems that reverse mortgage is facing in

India.

What are the risks from demand side and supply side that the companies are facing to achieve the estimated market?

The main objectives of the research paper are to study and bring out the:

(1) Factors impacting the demand of reverse mortgage in NCR:

The major factors are (I) Attachment to home

(ii) Financial stage and attitude

(iii) Acknowledgment of need

(iv) Availability of Information

(2) Factors impacting the supply of reverse mortgage in NCR:

The major factors are (I) Mortality risks

(ii) Interest rate risks

(iii) Property market risk

(iv) Cross over Risks

(3) The factors which can impact the future growth of reverse mortgage loans in NCR

**Proposition 1.** Increase in demand of reverse mortgage will lead to growth of reverse mortgage in India.

### **Literature Review**

Whatever degree we ought to consider housing equity value as retirement funds relies upon what exact degree elderly property holders are eager and ready to expend their housing wealth. It is notable that numerous seniors favour remaining in their homes for whatever length of time that they can. For example, in a study supported by the American Association of Retired Persons (AARP), 95% of people 75 years of age and more seasoned concurred with the announcement "What I'd extremely get a kick out of the chance to do is remain in my present living arrangement as far as might be feasible.

Venti and Wise (1991) break down the 1984 Survey of Income and

Program Participation (SIPP) data and find that a reverse mortgage as annuity instalments would substantially influence the salary of the single elderly who are extremely old.

Merrill et al. (1994) utilize the 1989 American Housing Survey (AHS) information to demonstrate that out of the 12 million elderly mortgage holders who claim their homes without a worry in the world, 800,000 could profit significantly from graduated home buybacks rather than taking a middle class unit and concentrating on the salary expanding part of home reverse mortgage.

Mayer and Simons (1994) look at the entirety appropriation of elderly family units and consider both salary increments and obligation decreases as advantages of reverse mortgage. Accordingly, they locate a lot bigger potential market for reverse mortgage than past investigations: more than 6 million mortgage holders in the U.S. could increase their viable month to month pay by in any event 20%.

It is further investigated on the demand of the reverse mortgages and the researcher found that the people who are extremely old without any old heir and the people who are having health issues are likely to take the reverse mortgages. People who are having health issue take reverse mortgage to cover their costs and maintain their lifestyle (J. Hous Res et al., 1999).

In U. S.A, studies reveal that the person having the high educational knowledge will have high interest in reverse mortgage (Davidoff T., Gerhard P. et al. 2017). So, we can say that increase in the educational standard in India will lead to increase in the demand of the reverse mortgage in the country So also, in China, a study previously had done on the older person who are house rich but cash poor and who are having a sound knowledge about the equity, bonds and various financial bonds. The study reveals that person having a sound knowledge about the financial instruments is having a good interest on reverse mortgages. So, we can conclude that reverse mortgage will grow as the awareness of financial instruments increase in the market.

According to the socio-cultural point of view, it has been found that

reverse mortgage is also impacted due to socio-cultural factors. Socio-cultural factors like bequest motive, home attachment, ethnicity, intergenerational transfer and expectation from family members impact the demand of the reverse mortgage. These factors impact the decision making of the reverse mortgages (Yoo I., Koo I., 2008)

A number of studies have discussed nature of housing equity of the elderly from several angles. First, most elderly have a strong attachment to their home and for them home is an emotional and psychological resource (Gibler and Rabianski, 1993).

Second, high transaction costs associated with selling of a residential house property also discourage the elderly from transferring housing wealth into consumption (Gibler and Rabianski, 1993).

Third, most retirees do not regard housing wealth as fungible asset. They regard their house simply as a place to live in and thus do not make any consumption decisions based on that asset (Walker, 2003).

But reverse mortgage has some risks from lender side. Reverse mortgage will not grow if there is demand but it has to grow from supply side. The lenders of reverse mortgage have various risks like:

- (1) Mortality risks
- (ii) Interest rate risks
- (iii) Property market risk
- (iv) Cross over Risk

Davidoff (2006) used American Housing Survey data to show that homeowners over 75 percent spend less on routine maintenance of their house property than younger owners of similar homes. The study observed that in practice, the moral hazard problem is mitigated because borrowers remain the residual claimant of the house value, and also because lenders are insured against the risk that the proceeds from the sale of property fall short of the loan balance. This was contrary to the earlier held general view that moral hazard problem on home maintenance could make lenders think twice before entering the reverse mortgage business.



Wang, Valdez and Piggott (2007) has spoken in their paper that because of proceeded extending life span, the market for reverse mortgage has matured. Nonetheless, different dangers engaged with reverse mortgage, particularly the life span hazard segment, have limited the improvement of this reverse mortgage to some degree. In this paper, they have recommended utilizing securitization to manage the life span hazard to the moneylender. Their results show that the mortality securitization is a decent strategy to control the life span hazard backward home loans. They found that through the securitization exchange, the loan specialist can accomplish a long run assurance with minimal premium.

After reading the above literature, it comes in the light that a very limited research has been done on the aspect of the behaviour of the person who is opting for reverse mortgage.

According to the paper, Mason and Bearden (1980) found that one-third population of older age think that taking credit is a bad practice.

Nelson (1980) in a survey of Wisconsin homeowners aged 65 and above showed that three-fourth of the respondents preferred getting on with less income than taking a loan.

Huck (1987) ascertained that older consumers do not generally like buying on credit.

Kotlikoff and Summers (1981) estimated that about 80 percent of household wealth is inherited, indicating thereby that bequests are an important component in aggregate wealth accumulation.

But all these research has been done in the early 80s and early 90s, the world has been drastically changed and the attitude of the people has been changed and now people are ready to take credit to support their lifestyle and medical fees.

Chatterjee (2016) has defined Reverse Mortgage (RM) loans as financial security for asset rich cash poor elderly. He has defined it as hybrid financial products wherein homeowners above 60 years of age can borrow against the collateral of their house. They are not required to repay the loan or its interest during his/her life time or till the time he/she chooses to stay in the home.

Mohammed and Sulaiman (2017) have stated that the elderly population often finds it difficult to afford medical bills and associated retirement costs. He further stresses on inadequacy of social security systems such as pension schemes and other welfare schemes that can support the elderly after their active working age. Reverse Mortgage can be a viable solution to the elderly financial woes during their golden years.

Neha Misra (2019) also asserts that the senior citizens are not required to repay any kind of loan amount or a monthly repayment of principal or interest during their lifetime while staying in the same house which releases them from worrying about repayment or eviction from home.

Zheng, Xikun (2016) studied the interest rate fluctuations and analyzed the influence of interest rate on reverse mortgage loan pricing. Their study suggested that the lenders can introduce interest-rate ceiling or floors, so that the borrower or the lender can get the benefits.

Austin Quinn, (2017) A home equity conversion mortgage (HECM) is a popular type of Federal Housing Administration (FHA) insured reverse mortgage in USA. The Federal Housing Administration (FHA) is a U.S. agency offering mortgage insurance to FHA-approved lenders so that more people can become eligible for this type of loan. Mortgage insurance protects lenders against losses from mortgage defaults. It collects payments at the closing which is equal to the 2% of the home appraised value. It also collects the annual premium which is equal to 0.5 standing loan balance and focuses on the property propriety reverse mortgage. It is privately insured by the mortgage company and is based on the standard best practices which provide consumer protection.

Manning Greenwood and Kirby (2018), throw light on the risks which are related to the Reverse Mortgage from the borrower perspective; According to them the reverse mortgage is difficult to understand because it involves a very complex and confusing process. Thus, the senior citizens who wish to enter into the reverse mortgage do not fully understand the terms and condition which are related to the loan. The reverse mortgage is a perceived to be very expensive process because of its type and implementation process. The low loan to value ratio doesn't help to make it better either. Also, the compound interest of the home loan is secured for the

borrower and the payouts made to the borrowers are subject to change and also depends on the interest rate and valuation of the property at least once in 5 years which may decrease the payout.

As a result, the evaluation of the property rate of interest in terms of the value of the property goes up and down which makes a negative impact on the motive of the senior citizens.

Saurabh Padmakar Balote, (2016) have listed various drawbacks in Reverse Mortgage offerings that make this proposition risky and unattractive for the borrowers. These include Limited payout tenure, low loan to value ration and uncertainty of payouts.

As per the operational guidelines of National Housing Bank for the Reverse Mortgage Loans the loan the maximum loan disbursement period is between 10 to 20 years. In case the borrower or his/her spouse outlives the tenure they may not have adequate money to support their survival.

Moreover, the Loan to payout ratio is only 60% which is low considering higher equity in houses and rate of appreciation of residential property. The market value is usually much higher than the valuation by government approved agencies. It makes reverse Mortgage loan a low income generating option compared to the value of the asset.

The lender carries out the valuation of property at regular intervals at least once in 5 years. Then there are fluctuations in Interest rates. Payouts may change as per the property revaluation and change in rate of interest if the floating Interest rates are offered. This makes the payouts uncertain for the borrower as well the lender.

In this paper, we will evaluate the factors which can impact the scope of reverse mortgage from demand side and the factors which can impact the scope of reverse mortgage in National Capital Region from lender of reverse mortgage.

**Table-1**

AUTHOR	YEAR	KEY FINDINGS IN THE RESEARCH
Venti and Wise	1991	Found that a reverse

		mortgage as annuity instalments would substantially influence the salary of the single elderly who are extremely old.
Merrill et at.	1994	Out of 12 million elderly mortgage holders 800,000 could profit significantly from graduated home buybacks
Mayer and Simons	1994	The researcher found that the people who are extremely old without any old heir and the people who are having health issues are likely to take the reverse mortgages. People who are having health issue take reverse mortgage to cover their costs and maintain their lifestyle.
Davidoff T, Gerhard P et al	2017	the person having the high educational knowledge will have high interest in reverse mortgage
Yoo I, Koo I	2008	Reverse mortgage is also impacted due to socio-cultural factors. Socio-cultural factors like

		bequest motive, home attachment, ethnicity, intergenerational transfer and expectation from family members impact the demand of the reverse mortgage.
Gibler and Rabianski	1993	Most elderly have a strong attachment to their home and for them home is an emotional and psychological resource
Walker	2003	Most retirees do not regard housing wealth as fungible asset. They regard their house simply as a place to live in and thus do not make any consumption decisions based on that asset.
Davidoff	2006	Used American Housing Survey data to show that homeowners over 75 percent spend less on routine maintenance of their house property than younger owners of similar homes.
Wang, Valdez and Piggott	2007	Their results show that the mortality securitization is a decent

		strategy to control the life span hazard backward home loans.
Mason and Bearden	1980	Found that one-third population of older age think that taking credit is a bad practice.
Nelson	1980	Founded that population above 65 years preferred having less income than taking any loan.
Huck	1987	Ascertained that older consumers do not generally like buying on credit.
Kotlikoff and Summers	1981	Founded the change in the 80s and 90s that the attitude of people had been changed regarding the loan and they are ready to take credit.
Chatterjee	2016	Defined the reverse Mortgage loan as a financial security.
Mohammed and Sulaiman	2017	Concentrated on the problems of elderly population regarding their medical costs and associated retirement costs.
Zheng, Xikun	2016	Analyzed how the interest rate would affect

		reverse mortgage loan pricing.
Austin Quinn	2017	Elaborated the insurance linked features of HECM loans in USA
Manning Greenwood and Kirby	2018	Talked about the risk of Reverse Mortgage from the view point of the borrower and also how it affected the elderly people who want to get into it but couldn't.
Saurabh Padmakar Balote	2016	Brought into limelight as to why the Reverse Mortgage Offerings seem risky and unattractive to the borrowers.

### Conceptualization of Constructs

A basic meaning of reverse mortgage can be “Reverse Mortgage is a loan accessible to seniors and is utilized to discharge the home value in the property as one single amount or various installments. The mortgage holder's commitment to reimburse the credit is conceded until the proprietor dies, the house is sold, or the proprietor leaves (e.g., into matured consideration)”.

The examination of definition gives some fundamental highlights of house buyback items. These are.

The advance is accessible just to senior residents owning a home. The advance can be as Lump-entirety or numerous installments like annuity and so forth.

Homeowner does not have commitment to reimburse the credit till the house is his prime living arrangement

The recompense is done once the proprietor kicks the bucket or goes out.

This is done however selling the house and recouping the advance through its returns.

Consequently a property holder going for home buyback may take his installment in the accompanying structure.

A singular amount toward the start (can be utilized for home improvement wellbeing costs and so forth)

Monthly installments till a fixed term

Monthly installments as a long lasting annuity

Establishing an acknowledge line for or without collection of enthusiasm on layaway balance.

A blend of the above mentioned.

A few banks have turned out with plans not the same as the above to suit the necessities of the borrowers. Some of such plans are

1. Home Reversion/Sale and Lease Back-The property holder sells the house yet keeps the privilege to live in the house till the time it is his prime habitation. The sum could be utilized for home improvement, some other wellbeing need and so forth.

2. Interest-just Mortgage-The borrower takes single amount and pays just enthusiasm amid his lifetime. The primary is recuperated through the clearance of the home

3. Mortgage Annuity/Home Income-The advance is utilized to buy an annuity for the property holder. The preferred standpoint is that regardless of whether the property holder moves out of the home, the annuity will proceed till his passing

4. Shared Appreciation Mortgage-This gives advances at an underneath market loan cost.

Consequently, the bank gets a pre-concurred share in any gratefulness in the property estimation over the amassed estimation of the credit.

The different contemplations which should be taken while estimating a result of this nature are



Age of the borrower-If it is a joint getting then the age of the more youthful borrower is considered.

Value of the property-Then estimation of the property assumes a noteworthy job in deciding the cost for a RM item

Expected Interest Rate-As the item takes after the ordinary annuity item in some sense, the present and expected intrigue likewise assumes a noteworthy job in evaluating the item

As can be seen from the abovementioned, we can find that the item has taken numerous structures amid its assessment. Be that as it may, is there a genuine need of reverse mortgage in India?

### Operationalisation

#### Reverse Mortgage Market for India

The general public in India has under-gone colossal changes in last 4-5 decades. Family unit has supplanted the joint family framework. The arrangement of family supporting the more seasoned individuals has gone. As referenced before the open annuity framework has not had the capacity to give a substitute help to elderly individuals.

This condition leaves the more established individuals in danger. They face following issues

- Outliving their retirement salary
- Depending on their kids to help pay costs
- Getting wiped out and having no real way to pay the costs
- Not having the capacity to ensure a salary for their companion after they are no more
- Being ready to live as long as they can imagine in their very own home

Taking a gander at the present circumstance, the requirements for an item which can assist these individuals with solving a portion of these issues is dependably an appreciated advance. Invert home loan or value discharge items attempts to answer every one of these issues. Each Indian, regardless

of its pay level endeavors to assemble a home for himself amid his working life. Switch home loan will give him/her a chance to produce salary from that home. As the proprietorship stays with the borrower, he can exchange the home to his successors likewise if the later consents to pay the credit sum. Such an item diminishes the weight on government likewise to give maturity security and along these lines government additionally needs to help such activity.

Numerous economies have been profited by this game plan and the market for such items has increment a considerable amount in these business sectors. Two such precedents are the UK and the USA showcase. Switch Mortgage in Developed Markets.

#### Research Methodology

It was expected the reverse mortgage market in India will be of 5000 crore if reverse mortgage market grows at the expected rate. In this study, we will read the consumer behavior of the old people who own a home in NCR, mainly Gurugram. The main reason of choosing this place is because of growth of this area. And the educational level of the citizen in this place is appropriate for the research work.

There are around 4717954 household in Gurgaon according to the census report of 2011 and out of this around 1, 23,215 household is owned by the people aged above 62.

So, these are a huge number and a huge opportunity for the banks that are providing reverse mortgage. And these are good number of sample to study the consumer behavior of the people taking Reverse mortgage loan.

#### Research Design

In this study, exploratory research design has been opted. Exploratory research design is used when the researcher thinks there are some variable which are still not discovered in that field.

In the field of reverse mortgage exploratory research is required because reverse mortgage came to India in the year 2008 but still after a decade reverse mortgage hasn't grown as expected.

So, there can be chances that there are some unobserved variable which can increase the demand of the reverse mortgage.

Exploratory design will help to bring out the variable and that variable will help to predict the consumer behaviour in a better way.

#### Sampling Design

Sampling method: In this research Convenience sampling has been used. The main reason of using Convenience sampling is because in this research we want qualified people whom might have good knowledge in reverse mortgage field and people who own a house in Gurgaon.

Sampling Frame: The sample frame contains the decision makers and house owners. This sample frame will be used to know about the consumer behaviour that is opting for reverse mortgage loans.

The sample frame also includes the company who lends loan to the people. The sample will include the employee of the company and they will be interviewed to know about the behaviour of the company before granting the loan.

Sampling Area: -The sample area of this study is limited to the Gurgaon area

Sample Unit:-Sample unit contains of the

- (1) owners of the house in Gurgaon area
- (2) and whose age is above 62

To know about the behavior of the supplier the sample unit contains of

(1) Should be the employee of the bank or financial institution providing reverse mortgage loan

(2) He should be in the department of decision maker who sanctions the loan

Sample Size: - In this research I have interviewed 5 loan managers from Banks and 3 from Financial Institutions and 20senior citizens to know about their mentality about reverse mortgage

#### Instrument Design

Qualitative study: Semi-structured questionnaire for focus group and in-depth interview. Under this research, a semi structured questionnaire was developed. The responses of respondents were recorded and transcript to bring out factors out of it.

#### Source of Data

This research will contain both the data,

(1) Primary data: Responses collected from home owners and lenders.

As it is an exploratory study, in-depth interview using soft laddering technique was required to bring out new factors.

(2) Secondary data: Literature review

Literature review is important because previous researches will be helpful to collect the various factors which have been impactful in increasing of demand and supply of reverse mortgage in India.

#### Method of Data Collection

In this research, the method of data collection is from in depth interview. We have interviewed bankers and the senior people and we have recorded the interview and transcription done according to the interview.

#### Instrument type

Semi-structured questionnaire for in-depth interview. Under this research, we have developed a semi structured questionnaire.

#### Measurement Error

Non response error: In this study, we can have non- response error. The interviewer can say no when they will be asked question related to their home.

Self-selection: There are chances of transcription error while evaluating the response from the interviewer. There can be chances of personal biasness.

#### Analysis Tools used

Firstly the transcription of the recording was done followed by data

cleaning. Data cleaning means the data which had no relevance in the research was cleaned. The word cloud was used to bring out the factor/factors most repeated or used in all the interviews.

#### Analysis

Text analysis is one of the common and reliable methods in exploratory research and it is one of the major techniques to bring out some new factor. Under Text analysis, we first record the interview and then break the interview and write down in system where system can read the data. It involves set of techniques and approaches towards bringing textual content to a point where it is represented as data and then mined for pattern and trends.

Text mining includes much process like

Loading the text

Text transformation

Cleaning the text

Word frequencies

Generating word cloud

Text mining method shows the most repeated word in a paragraph or text. We create a word cloud which is a graphical representation of the word frequencies. The main reason of using the Word cloud is because of the simplicity in understanding and ease of use. It is straight forward and visually appealing method of text analysis (Heimerl et al., 2014).

#### Socio-Demographic Details

In this research, 8 corporate people and 20 senior citizens have been interviewed. Those corporate people have been selected who are directly associated with reverse mortgage and hence these include loan managers banks and financial institutions and the only senior people whose age is more than 62.

Several banks and financial institutions were included in this research. It was decided to have a secrecy policy that maintains the participant's anonymity, the banks and interviewees will not be named. This was done in

order to mitigate the potential for information being tied to specific companies, since it could reveal their management policies, business operations, etc. Eriksson and Kovalainen (2015) have emphasizes this by stating that concerns like these when conducting research are “common in business research, particularly if extracts of interviews or conversations are used in the research paper”. The companies and interviewees will be named using pseudonyms thus safeguarding them and hopefully allowing them to speak more freely.

#### Factors affecting the demand and growth of reverse mortgage in India

The first part of the interview guide dealt with the factors affecting the demand for reverse mortgage from a financial institution point of view. In order to facilitate for the reader and make the empirical findings as presentable as possible, the empirical findings will be divided into the same topics as the interview guide.

The interviews were voice recorded with the approval of the interviewee. These interviews threw light on several factors that affect the demand of reverse mortgage in NCR and also several steps that can be taken to increase the demand for the same. Reverse Mortgage, though understandable much needed in India has failed to get popularity in India. After going through the process of transcriptions several factors have been identified from the financial institutions and banks.

Manager A1 said that Gurugram has much potential for Reverse Mortgage as the number of old home owners is high. These homeowners do not prefer to live with their children and often choose to live alone. According to him, the reverse mortgage has not gained popularity yet due to lack of awareness. He further said that it would be too early to comment on the success or failure of the product. Reverse Mortgage loan is an instrument which is yet untapped and its future will be clear in next five years. He said that potential of reverse mortgage loans is due to the following reasons- Awareness of the Reverse Mortgage, Change in the mentality of the society, Growth of the rural market, and off course the growth of real estate. He was confident that the credit rating of the loans of reverse Mortgage in India will have a positive effect on its demand.

Manager A2 said that they had introduced reverse mortgage in 2007 and had discontinued the in 2012 to be reintroduced again in 2014 and they have seen some demand only after 2014. Lack of awareness and absence of promotion of the scheme by banks and government are seen as two important factors which have resulted in low demand for the product. Better promotion to spread awareness and counseling by banks to the borrowers will lead to increase in the demand. Legal issues of property, Interest rate risk as per RBI, Damage to the property and incorrect valuation of the property are some of the risks that she associated with the loan.

Manager A3 from a bank in west Delhi said that the senior citizens preferred to rent out a part of their dwelling than taking a loan against this. He didn't see any risk to bank which will prove to be detrimental in advancing the above loan. He although can be called an outlier.

Manager A4 from one of the leading public sector bank stated that banks do not want to tie up their money for an indefinitely long time. The----- with RBI is very high which discourages banks to provide the loan. He further stated that banks face the risk of litigation by the children after the death of the borrower. He pointed out that they don't see much demand for reverse mortgage loan. The reasons are lack of awareness, complex product and very low loan to value ratio. He further stated that certain factors such as attachment with property, fear of alienating children and a psychological barrier against borrowing are some barriers to demand for reverse mortgage loan.

On replying to the question on the future prospects of reverse mortgage loans Manager A5 promptly said that government support in protection from loss on the loans, spreading awareness and promotion and control in interest rate fluctuations. Spread of awareness, better promotion, counseling facility for borrowers are some of the factors repeated by most of the respondents.

An interesting discovery noted as the interviews went on was that the terms and conditions for the reverse mortgage seemed to differ much among the banks and financial institutions offering the loan. For example, some institutions offered a term to maturity of the loan for only 10 years where as others offered the loan for a period of 15 years. None of the respondents claimed to be giving the loan for 20 years period. The banks and financial

institutions interviewed also had a limit for how much one could borrow, spanning from 50 to 60 percent of the total house value to even as low as 35-40% of the house value and some setting the limit at INR 1.5 cr. By setting this limit fairly low they argued that the risk of the house being worth less than the loan at the date of maturity was very low. Some banks mandated the payout of minimum 25% as lump while others let their customers choose among the alternatives.

While asking about the risks that banks and financial institutions are exposed to with reverse mortgage loans Manager 6 mentioned interest rate fluctuations, cross over risk, risk of litigation and incorrect valuation of property are some of the risks that the employee mentioned during the interaction. These and some other risks foreseen by the respondents include risk of moral hazard, early repayment, litigation by children, takeover of property by the government and the longitivity risk which can be however mitigated if there is a diversified pool of borrowers.

Main factors affecting the demand for reverse mortgage loans from Lenders perspective are:

Better promotion of financial instrument

Untapped market

Customer Mindset

Interest rate or processing fee

Litigation

High provision rate

Cross Over Risk

Interest rate fluctuations

Longitivity risk

Transparency and accuracy in valuation of property





**Figure 1.**

Second set of respondents were senior citizens, the potential borrowers of reverse mortgage loans. Efforts were made to include a diverse set of respondents from the gender, economical background and different marital status. Some very important points were extracted from the interviews. Different codes have been provided to respondents where SC stands for senior citizen and B is for second set of respondents followed by the serial number of the respondents. Thus we have respondents SC B1 through SC B20.

Out of total 20 respondents, 14 had no information about reverse mortgage, 3 had just heard of it and had very little information, 1 had once applied for reverse mortgage loan and 2 had incomplete or wrong information about reverse mortgage loans.

Out of those who had heard about the loan, 3 had heard from their bank managers and rest 2 had heard from their friends. All were told about reverse mortgage loans and its features after determining their level of information. They were then asked about their preference about the loan and about the factors that would discourage them from availing the loan.

A senior retired officer from army SC B3 said that he had heard about reverse mortgage loan from his friends. He said that he wants to avail this loan to buy another house in some other city. He was surprised that the payout cannot be used to buy another property. He had no motivation to take reverse mortgage loan.

Another retired government employee SCB13 said that reverse mortgage loan will help augment his govt. pension and he can enjoy his life better through loan payout. Two other senior citizens SC B5 and SC B8 and expressed the desire to go on world tour with the reverse mortgage payout.

On asked about the preference for loan, SC B1 said that it is a good initiative by the government of India. She is a widow and her son works abroad, so this can be a source of income for her when her meager savings run out. Same view had been stated by SC B5 who is working as store manager and has no fixed source of income after he retires in few years except to depend on his son. He said that reverse mortgage would ensure that he maintains same standard of living post retirement. SC B2 also expressed the desire to continue to maintain same standard of living post retirement but he also said that it will provide financial support if he or his wife face serious health problems in old age. SC B4 from Ghaziabad said that they would not consider reverse mortgage loan as mortgage is against the family pride. Attaching pride with housing asset and mortgage has been echoed by SC B7 and SC B9 as well. SC B8 who was an advocate in west Delhi and had applied for reverse mortgage loan was furious. The loan amount offered by the bank against his property was less than 30% market value of his house. SC B6 has approached several banks in Gurugram but he has felt reluctance on parts of banks to provide him loan. Almost all the respondents share the concern of extremely less payout ratio and uncertainty of payouts.

On the question of the factors that would discourage them from availing reverse mortgage loan and the risk they associate with the same, Most of them including B2, B5, B12, B18, B19 and B20 stated that they fear alienating their children if they opt for reverse mortgage loan. SC B1, B2, B16 and B17, B 19, B20 all had emotional attachments with the family. B1's grand parents had lived in the same house and it would be difficult for her to mortgage the loan. Whereas SC B14 who had bought the dream house for his wife who is no more said that he would not do injustice to her memory by putting the house on mortgage. By and large, psychological factors such as attachment with home, fear of children, social stigma are some of the reasons due to which senior citizens are reluctant to take the collateral. Many of them wanted to pass on their property to their children after their

death.

On question of understanding the provision of reverse mortgage loan, those who were aware of the loan or who had tried to avail the loan previously also found the instrument very complex and expensive.

For reverse mortgage to be successful in India, there needs a shift in attitudes and mind set of senior citizens. The property inheritance is deep rooted in Indian mindset and it will be hard to adopt the collateral culture in financing the retired life of senior citizens (Suresha and Naidu, 2012).



Figure 2.

Thus various factors affecting demand for reverse mortgage from borrowers and lenders perceptive:

**Table 2**

Lenders perceptive		Borrowers perceptive	
Facilitators	Barriers	Facilitators	Barriers
<ul style="list-style-type: none"> <li>-Huge potential Market due to aging of population</li> <li>-Budgetary pressure on govts due to social security schemes</li> <li>-Large urban middle class asset rich-cash poor population</li> <li>-Interest shown by elderly in the scheme</li> </ul>	<ul style="list-style-type: none"> <li>-Uncertainty of payout</li> <li>-Interest rate fluctuation</li> <li>-Absence of transparent and effective valuation of property</li> <li>-Risk of moral hazard</li> <li>-Risk of longevity</li> <li>-Cross over risk</li> <li>-Issues with recovery of loans</li> <li>-Risk of litigation</li> </ul>	<ul style="list-style-type: none"> <li>-Lack of adequate savings</li> <li>-Lack of social security scheme</li> <li>-Dissolution of joint family system</li> <li>-Desire to maintain good standard of living post retirement</li> <li>-Financial support during health issue</li> <li>-Certainty of cash flow during emergency</li> </ul>	<ul style="list-style-type: none"> <li>-Lack of awareness</li> <li>-Low payout ratio</li> <li>-Complex and expensive instrument</li> <li>-Bequest motive</li> <li>-Aversion to loan</li> <li>-Attachment to home</li> <li>-Low levels of literacy</li> <li>-Uncertainty of payout</li> <li>-Uncertainty with taxation</li> <li>- Preference for generating rental income</li> </ul>

Categorization of the factors affecting to the growth of reverse mortgage is as follows:

### **Facilitators for Growth**

Increasing standard of People

Untapped market

Increase government intervention

Decrease in processing fee and Interest rate

Growth of Real estate

Rise in Health expenses of the people

Increase in Literacy rate

**Barrier to Growth of Reverse Mortgage**

Attachment to home

Better saving plans

Better retirement plans

Mentality of passing the property to their children (Bequest Motive)

Lack of Trust

Complex Reverse Mortgage Plan

There can be many more factors which can help in growth or act as barrier to the growth of reverse mortgage which can be revealed from further studies.

**Conclusion**

With the rapid graying of population, large scale immigration of work force and resulting in the collapse of the joint family system, introduction of reverse mortgage loans was calls of the time. Instead of being dependent on their children for monetary support, this would be a good option for the elderly to continue to live their life with dignity.

Absence of social security systems, inadequate savings do necessitate the need for an instrument like reverse mortgage by the retired people during their postretirement period. But on other hand the level of awareness about reverse mortgage loan is very low. The current market penetration of reverse mortgage loan is also very low as the borrowers find the loan instrument complex and expensive. However the future prospects for reverse mortgage loan seem good because majority of respondents have favored the

concept and have shown intentions to avail the loan. However, psychological factors, bequest motive, aversion to loan continue to remain serious determinants.

### **Theoretical Implication**

Reverse mortgage is instrument which is being designed to help the senior people to live the life which they were living before the retirement and they don't need to compromise the living standard which they were living.

With the help of these factors any researcher can carry on their research to predict the growth of reverse mortgage and suggest any company or people to take loan or not.

### **Managerial Implications**

This research will help all companies which are working with reverse mortgage and it will slightly help them to understand what customers are thinking and what are the factors which will help them to grow in developing countries and what are the problems they have to face in the near future

### **Future Scope**

Any researcher can use these factors which has been discovered and can research and bring out the data at a larger scale and can check the factors in different area and can say whether this factors can be generalized or not.

The exploratory research will help the other researcher to know about the behavioral impacts related to reverse mortgage and which are the factors people consider before taking loans or home loans

### **Conclusion**

The conclusion of this research is that if any company wants to grow in the market of reverse mortgage and want to grab the market they have to work on the growth factors as well as barrier factors.

Reverse mortgage cannot grow on its own and there must be support of government and some promotional techniques which will increase the awareness about the reverse mortgage and companies has to bring some

changes in the mind of the people about the land or property.

Reverse mortgage can help to bring out the many families from low standard life to a better standard of life and the families who are facing cash crunch can take help of reverse mortgage.

According to the interviewee,

The coming 5 to 10 years will witness the growth of reverse mortgage because this coming decade will witness the growth of real estate and change in the mentality and if the above mentioned factors kept in mind the reverse mortgage will see a boom.

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