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THE DETERMINANTS OF REVERSE MORTGAGE CHOICE OF INDIAN ELDERLY HOMEOWNERS FOR SUSTAINABLE LIVELIHOOD: A LOGIT ANALYSIS

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Abstract

Purpose: In the regime of stretched old-age social security, federals and policymakers are presuming housing wealth as a means of sustainable livelihood for elderly homeowners. The current study attempts to discover which demographic and financial factors are significant determinants of home equity liquidation through reverse mortgage of Indians in later life.

Methodology: Binary logistic regression is applied to survey-based primary data of 410 elderly homeowners through SPSS software.

Main Findings: Results of binary logistic regression model depicts that elderly considering an RM likely to be female, older, having poor health, childless or having girl child only, long life expectancy, resident of metro, employed, cash-constrained, not having any kind of insurance cover and those children are financially well are significantly more willing to opt for RM scheme.

Implication: Study renders implications for Government and NHB, to provide refinancing facility to commercial banks so that home equity liquidation product like Reverse Mortgage can be able to fulfill income needs of greying India.

Novelty/Originality: Length of research in European and western countries have been carried out to explore the attitude of older homeowner for housing wealth liquidation but Indian context, is largely untapped that how Indian older homeowner perceive their housing wealth and which factor influences them to delete it. In this way, current study attempts to bridge the research gap.

Keywords: *Cash poor- Home Rich, Demographic Determinants, Economic Determinants, Housing Wealth, Population Aging, Reverse Mortgage.*

INTRODUCTION

Around the globe, baby boomers (Cohort of those older people born in between 1945-1965) adversely affected with a common rigor i.e. inadequate fund for managing later life. Evaporated familial value coupled with shattered social security net force elderly individuals to manage retirement life by private funds. Retirement funding of baby boomers has drawn the attention of almost federals, as, over the world, elderly aged 60 and above constitute about 13% of total population. India too is not exempted from striking aging event, converting its demographic dividend into demographic challenge by possessing 9% of elderly people in total population structure. Pathetic social security system coupled with mass unorganized working sector and tapering off extended and joint family custom results into jeopardy and economic vulnerability of Indian elderly.

Globally, housing asset is weighted as most valuable assets, which hold almost biggest share in total wealth portfolio of aged (Venti, S.F. & Wise, D. A. 1991) although tied in illiquid framework, making them "Cash poor, Home Rich" (Chou, K. L. et al., 2006; Gupta, S. & Kumar, S. 2018a). Key research question on the use of housing wealth accumulated by baby boomers has pulled the attention of number of economists and their leading research is directed to investigate how elderly homeowners look their mass home equity during later life. Can this mass housing wealth be utilized for post-retirement funding by elderly homeowners as stated by Life-Cycle Hypothesis (LCH) which proposes that in event of economic adversity elderly will deplete their assets?

The present study attempts to unveil attitude of Indian elderly homeowners regarding use of housing wealth via considering Reverse Mortgage (RM) to fund later life for smooth consumption purpose. Except RM there are traditional methods like selling and downsizing, which result in the realization of cash or liquidity to older homeowners but simultaneously challenges aging in place. To eradicate this particular problem of moving, number of countries with financial sophistication opened new schemes and products to unveil housing wealth which is in illiquid state to generate continuous cash flows, without moving or enjoying aging in place, with the help of home equity release products.

RM is one of the equity release products. (Boehm, T. P. & Ehrhardt 1994) defines RM as "financial contracts that allow a homeowner to consume some of the home equity but still maintain homeownership and residence in the same. In a typical arrangement, a financial institution agrees to make payments to the homeowners for a specified period of time. The amount of money borrowed depends on the age of borrower, the appraised value of the home and the current interest rate. The loan, consisting of principal and accrued interest, becomes due and payable when the borrower no longer occupies the house. The loan is repaid with interest when the borrower sells the house, moves permanently or dies."

In order to eradicate economic adversity of "cash poor home rich" Indian elderly homeowners, Indian government tuning with other federals like USA, UK, Australia, Canada, Netherland, Korea etc. which are practicing RM extensively; launched Reverse Mortgage scheme (RM) as social welfare measure in 2007 under the supervision of National Housing Bank (NHB), which is an apex body in stream of housing finance (Gupta, S. & Kumar, G. 2017). This innovative banking scheme specifically designed for elderly homeowners was inaugurated by then, finance minister Mr. P. Chidambaram in finance bill of union budget 2007-08.

Housing decisions are of extreme importance for any age group, but seems most striking among older homeowners when it comes to dis-save/ decumulate housing wealth. In Indian tradition, home is not made for self; but, to passing it off-springs as a culture of filial piety or Bequest. The new era of modernization, migration, collapse of extended and joint family and elder abuse produce enormous situations where elder homeowners may relook their housing asset as a source of pension and may unlock home equity. The current study attempts to investigate various demographic and financial factors that motivate or restrain elderly homeowners to consume their home equity through reverse mortgage, to fund later life. It would be very interesting from the outlook of policymakers, banking, and Insurance sector that what are the key demographic and financial factors which influence demand of RM in India.

LITERATURE REVIEW

In western and European context, there is plenty of survey-based researches which used variety of demographic and financial factors in their study and found their influence on the elderly homeowner's willingness to consider RM. Some prominent demographic and financial factors used in most studies are as follows:

Gender of older homeowners is studied extensively in the literature related to RM. Results of studies in context of this dimension are not uniform. (Font, C. J. et al., 2010; Fornero, E. et al., 2016; Ong, R. 2008) found women were more willing than men to trade-off housing wealth by RM. While, (Chatterjee, S. 2016) found men were positively willingness to consider RM.

Age is considered by and large; by a number of researchers indulge in exploring housing decisions of older homeowners and mixed results are found in literature. (Chen, A. & Jensen, H. H. 1985; Fornero, E. et al., 2016; Rauterkus, S. et al., 2009) found age to be negatively related to downsizing or desire for reverse mortgage. Another hand, (Vanderhart, P.G. 1994) found age was positively associated with moving to dependency arrangement due to poor health. (Chou, K. L. et al., 2006; Gupta, S. & Kumar, S. 2018a; Ong, R. 2008) detected that being older was positively linked with willingness of RM.

Education level or financial literacy of homeowners significantly has a bearing upon housing decision in late life. (Lee, Y. G. 2005; Salandro, D., & Harrison, W. B. 1997) found education level with positively associated with RM. While, (Fornero, E. et al., 2016) found educated homeowners were unwilling towards mortgage equity withdrawal.

Marital status of older homeowners impacts a lot of housing decisions of them, so studied extensively and animus results are found in this context. Some researchers investigated married homeowners were less willing than singles (Chatterjee, S. 2016; Fornero, E. et al., 2016). Other hands, (Salandro, D., & Harrison, W. B. 1997) found married older were reluctant for equity release schemes.

Child status has a significant bearing on household housing decisions in later life; hence, prior studies devoted it significant attention in their research work. (Feinstein, J., & McFadden, D. 1989) found having children mitigated the probability of homeowners to downsize by any means like selling the home, acquire mortgage on home, moved to a rented house. (Chou, K.L. et al., 2006; Gupta, S. & Kumar, S. 2018a; Venti, S. F. & Wise, D. A. 1990) found absence of children was positively associated with willingness of RM.

Living arrangement plays a significant role in housing decisions of elderly homeowners. (Case, B. & Schnare, A. B. 1994; Gupta, S. & Kumar, S. 2018a) detected the fact that older homeowners who were living alone were more willing to trade down with RM. Contradictorily, (Salandro, D., & Harrison, W. B. 1997) found large family size was positively associated with liquidating housing wealth. (Painter, G., & Lee, K. 2009; VanderHart, P. G. 1995) discovered in their study that elder homeowners who were residing near to family members were disinclined to downsize.

Health or physical capability of older homeowners is an important factor while taking housing choice decision by them. (Chatterjee, S. 2016; Dillingh, R. et al., 2017) found elder with better health conditions were willing to tap home equity. The adverse effect of aging may force older homeowners to be tenant, downsize or relinquish homeownership (Gupta, S., & Kumar, S. 2018b; Painter, G., & Lee, K. 2009; VanderHart, P. G. 1994).

Unknown life span has an important consideration upon the housing decisions of older homeowners. There are mixed results while investigating impact of uncertain life span on older homeowners housing decisions. (Mayer, C. J., & Simons, K. V. 1994) found that reason for low participation in annuity market and least use of housing wealth in financing old age; was mainly induced by precautionary motives. Another hand, (Gupta, S., & Kumar, S. 2018b; Salandro, D., & Harrison, W. B. 1997) claimed higher life expectancy may induce older homeowners to tap home equity.

Awareness of RM is studied by a number of researchers and they concluded that lack or absence of awareness of RM or annuity products causes lower participation by elderly. (Font, C. J. et al., 2010) and (Rauterkus, S. et al., 2009) found positive and significant relationship between prior knowledge or awareness of RM and intention for applying it. Contrary to above, (Rasmussen, D. W et al, 1995) found negative relationship between awareness of RM and its demand.

Region of residence's influence on withdrawal of housing equity is studied by few researchers. (Gibler, K. M., & Rabianski, J. 1993) investigated effect of geographic region on the home equity liquidation decision through reverse mortgage and found it insignificant. (Lee, Y. G. 2005) studied region and using logistic regression revealed that some regions were significantly different from others in willingness for borrowing home equity. (Rauterkus, S. et al., 2009) found in their study of USA that location of responders plays significant role in showing interest for RM.

Employment status is an important proxy to check well being in old age by measuring the financial position of elderly individuals. Many studies considered employment status and found different results. (Chou, K. L. et al., 2006) not found any significant relationship between employment status and reverse mortgage uptake. (Hurst, E., & Stafford, F. 2004) discovered unemployed elderly homeowners were more willing to take reverse mortgage to fund later life.

The income of the elderly or household has a vital impact on housing decision withdrawal. (Bütler, M., & Teppa, F. 2007) found older homeowners who had low level of income were less prone to annuitize their housing wealth; thus, concluded positive relation between decision to annuitize wealth and income. Contradictory, (Chen, A., & Jensen, H. H. 1985) found negative relationship between income and willingness for reverse mortgage.

Value of home equity is one of the important determinants of the loan amount; hence influence decision making for opting RM by elderly homeowners. More the value of home equity more will be loan amount, thus would attract older homeowners to consider reverse mortgage. (Ong, R. 2008; Vanderhart, P.G. 1994) found Positive relationship between willingness of RM and value of home equity. While, negative relationship detected by (Gibler, K. M., & Rabianski, J. 1993) in literature.

Liquidity constraint is considered as an important factor; while assessing elderly homeowner's willingness of RM because it is designed to meet specific income needs of "cash poor-home rich" individuals. (Hurst, E., & Stafford, F. 2004; Benito, A. 2009) found liquidity constraint a significant positive predictor of trade down housing wealth. While, (Chou, K.L. et al., 2006) found no significant relationship between RM and financial strain.

Insurance possession whether life, health or medical; has a significant bearing on elderly homeowner's housing liquidation decisions. Ability to pay for emergent medical expenses increases with possession of insurance. (Case, B., & Schnare, A. B. 1994) found older homeowners who were able to meet large medical expenses were reluctant for the uptake of RM. (Chatterjee, S. 2016; Mitchell, O. S., & Piggott, J. 2004) found homeowners those had any kind of insurance were disinclined to liquidate home equity.

The economic well being of children is taken into consideration by handful studies as family concern and attachment is not as much prevailed in western and European context as in Asia. If elderly homeowners use their home as a mean of pension for consumption purpose in later life, they will not be able to pass it to their children. (Megbolugbe, I. F. et al., 1997; Painter, G., & Lee, K. 2009) found parents those children were financially strong were willing to trade off housing wealth through downsizing or RM.

Research Gap

An extensive review of prior studies reveals that substantial part of survey-based research carried out; related to use of housing wealth and RM in later life are in European and Western context. Little empirical evidence related to this phenomenon is found in Asian perspective; while, scanty empirical researches are related to India. Few studies have explored role of housing wealth to fund later life of older homeowners in India. By conducting empirical investigation, to identify significant determinants which influence willingness of elderly Indian homeowners to consume home equity, this survey-based research adds value in literature.

METHODOLOGY

Objectives of the study

Primary objectives to conduct this research are:

1. To identify demographic factors that have significant influence on Indian elderly homeowner's willingness to consider RM.
2. To identify financial factors that have significant influence on Indian elderly homeowner's willingness to consider RM.

Data

For the balanced representation of elderly from metro as well as non-metro areas, cross-sectional data of 410 older Indian homeowners of self-occupied property aged 60 or above is gathered from Delhi and three cities of Rajasthan state (Jaipur, Ajmer, and Alwar). This survey-based data was collected through a self-structured schedule using snowball and purposive sampling method by approaching 610 homeowners.

Variables of the study

The present study contains one dependent variable (DV) to accomplish the desired research objectives. DV is willingness to opt reverse mortgage (RM) and is coded binary 1 as willing to choose RM and 0 as not willing to choose RM. Independent variables are vector of demographic and financial factors. Age, life expectancy, value of home equity and family income are coded as continuous variables, excluding these other independent variables are coded as categorical variables.

Research Hypotheses:

To examine the relationship between various independent variables and dependent variable hypotheses construction is done by a critical review of prior studies. These are:

$H_{1.1:}$ Females are significantly more willing than male to consider RM to fund later life.

$H_{1.2:}$ Increase in age significantly influence elderly homeowners to consider RM to fund later life.

$H_{1.3:}$ Elderly homeowners with Professional education are significantly less likely willing than others to consider RM to fund later life.

$H_{1.4:}$ Married elderly homeowners are significantly less likely to express their willingness to consider RM to fund later life than others.

$H_{1.5:}$ Childless elderly homeowners are significantly more willing to consider RM to fund later life than others.

$H_{1.6:}$ Elderly homeowners who are living in empty nests are significantly more willing than others to consider RM to fund later life.

$H_{1.7:}$ Elderly homeowners who have longer life expectancy are significantly more willing to consider RM to fund later life than others.

$H_{1.8:}$ Elderly homeowners with poor health status are significantly more willing to consider RM to fund later life than others.

$H_{1.9:}$ Elderly homeowners residing in the metro are significantly more willing to consider RM to fund later life than others.

$H_{1.10:}$ Elderly homeowners those are aware of RM are significantly less willing to consider RM to fund later life than others.

$H_{1.11:}$ Elderly homeowners who are employed are significantly more willing than others to consider RM to fund later life.

$H_{1.12:}$ Cash/liquidity constrained homeowners are significantly more willing than others to consider RM to fund later life.

$H_{1.13:}$ Elderly homeowners with greater home equity are significantly more willing than others to opt for RM to fund later life.

$H_{1.14:}$ Elderly homeowners who belong to higher family income are significantly less willing than others to consider RM to fund later life.

$H_{1.15:}$ Elderly homeowners those children are financially well may be more willing than others to consider RM to fund later life.

$H_{1.16:}$ Elderly homeowners possessing any kind of medical insurance are significantly less willing than others to consider RM to fund later life.

Statistical tool

As DV willingness to consider RM is of binary nature and independent variables to be continuous and categorical nature, binary logistic regression is used to analyze the relationship between DV and IVs with the help of IBM SPSS 21 Software.

In order to test hypotheses, the model is defined as:

$$\text{Logit}(P_i) = \ln\left(\frac{Pi}{1-Pi}\right) = \beta_0+\beta_1\chi_1 + \beta_2\chi_2 + \beta_3\chi_3 + \cdots\beta_\kappa\chi_\kappa + \mu$$

Where,

Logit (P_i) = Log of odds that an event would occur

P_i = 1 if, the i^th^ older homeowner is willing to consider RM scheme.

$1\text{-}P_i$ = 0 if, the i[th] older homeowner is not willing to consider RM scheme.

β_0 = Intercept of the model

$\beta_{1,2\,\&\,k}$ = Explanatory demographic and economic variables of the study

μ = Error term

DISCUSSION / ANALYSIS

The major finding of this survey-based research was that majority of sample respondents were not interested in opting for RM to fund later life, reason might be bequest and precautionary motives, etc. Out of 410 total respondents only 76 homeowners wished to liquidate housing wealth via RM to secure late years.

To test the relationship between various demographic factors, economic factors and willingness to consider RM binary logistic regression is used and results are demonstrated in Table 1.

Table 1: Logistic Regression Model predicting willingness of elderly homeowners for RM Considering Demographic and Economic Predictors

Variables	B	Wald	Df	Exp(β)	Sig.	Alternative Hypothesis Testing Result
Female	1.090	4.529	1	2.976	.033**	Accept
Age	.165	4.213	1	1.180	.040**	Accept
Education status		4.016	4		.404	Reject
No formal education	.862	.289	1	.422	.591	
Primary education	-.553	.133	1	.575	.715	
Secondary education	-.005	.000	1	.995	.997	
College education	-1.272	.781	1	.280	.377	
Marital status		3.060	3		.383	Reject
Unmarried	.593	.137	1	1.810	.712	
Married	1.490	1.025	1	4.436	.311	
Widow	2.147	2.196	1	8.556	.138	
Child status		17.218	3		.001***	Accept
Only female child	1.894	10.964	1	6.644	.001	
Childless	1.822	4.895	1	6.186	.027	
Only son	-.566	1.006	1	.568	.316	
Living arrangement conditions		4.125	3		.248	Reject
Living with spouse only in own home	.462	.484	1	1.587	.487	
Living in a child home	-1.137	1.668	1	.321	.197	
Living alone in own home	1.671	1.924	1	5.315	.165	
Health status		1.0396	2		.595	Reject
Poor health	.254	.131	1	1.289	.717	
Average health	.487	.959	1	1.627	.328	
Non-metro (Rajasthan) region of Residence	-1.313	7.997	1	.269	.005***	Accept
Subjective life expectancy	.292	10.495	1	1.339	.001***	Accept
No awareness of RM	1.316	.925	1	3.727	.336	Reject
Not Employed	-1.589	9.699	1	.204	.002***	Accept
Financial assets sufficiency	-1.768	9.743	1	5.857	.002***	Accept
Not Insurance	1.423	6.231	1	4.150	.013**	Accept
Children not owning home	-1.757	11.787	1	.172	.001***	Accept
Log natural family income	-.296	.452	1	.744	.501	Reject
Log natural Value of home equity	-.998	2.115	1	.369	.146	Reject
Constant	.837	.004	1	2.310	.948	

*Note: ***represents P value less than .01.*

*Note: ** represents P value less than .05*

Note: Reference or omitted categories for categorical variables are; to be male, Professional, Separated, having both son & daughter, living with family in own home, healthy, resident of metro, aware about RM, employed, cash-constrained, insured and presence of child home.

Source: primary data

Hypotheses Testing and Result Discussion

Gender of the respondent was found a significant demographic determinant. Logistic regression results revealed that females are significantly more willing to consider RM to fund their later life because P-value was less than .05 % level of significance. The possible reason for this finding might be widowhood, coupling with economic vulnerability in the era of modernization when familial values are getting diminished. In such circumstances, in the absence of another regular source of income, a female with homeownership might consider RM to fund later life.

Age of respondent was found a significant demographic determinant. Logistic regression results demonstrated that respondents with higher age were significantly more willing to opt for RM than those homeowners who were younger old. Since old age is a focal point of adversities in which financial crises troubles the most; so, in absence of any family support or due to weaker social security system, older homeowner may willing to use RM as last resort. Thus, result from this study supports the assumption that RM may help older homeowners to satisfy their varying needs of fund like daily consumption and long term health care.

Education status was not found as a significant demographic predictor as per the results of logistic regression. Reason for this finding might be professional or educated people have better knowledge about negative aspects of RM like risk inherited in annuity products and its complexity or may have better retirement funding as there is positive relationship between education and retirement planning.

Marital status *(married homeowners as reference category)* of older respondents was not found a significant demographic determinant for interest in RM scheme. A possible reason for willingness of married people for RM might be larger consumption need of household in comparison of single ones and empty nest family in which children depart from parents for employment opportunities and parents remain alone thus due to lesser bequest motives married couples may look RM as an opportunity to convert illiquid wealth into cash streams.

Absence of children or having a female child were found as strong demographic determinant for showing interest in RM as per statistical results of survey. The possible reason for this result in Indian context might be a poor social security system and if, coupled with negligence from children then makes elderly vulnerable. Prevailing system of old care vests around the boundary of family where kith and keen care the elderly and home is given as inheritance to family members. In India responsibility of elder parent care lies on the shoulder of son rather on daughter. Thus, results are in line with Indian tradition too, where depending on daughter in old age, people assume better to use own resource. Being childless reduces the possibility of bequest thus home can be used as pension for lifelong by this segment. While, possible reason for the finding that elderly homeowners who had son they were significantly less willing to consider RM, might be presence of strong bequest motives, which hinders uptake of RM.

Living arrangement was not found as a significant predictor in present study. A possible reason for this finding may be strong bequest motive or social stigma.

Longer life expectancy was found as a strong demographic determinant in the current study. Logistic regression result revealed that elderly homeowners who had longer life expectancy were significantly more willing to consider RM. The possible reason for this finding might be view of elderly home owner's perception that they will receive whole life a certain amount, thus less anxiety of future and reduction of uncertainty. So, elderly homeowners who expect to live longer are more willing than others for RM.

Health was not found as a significant predictor of showing interest in RM in current study. Although insignificant, positive β coefficient value dummy variables poor health and average health; depicts that elderly homeowners those had poor and average health, they were more willing to consider RM to fund later life. The possible reason for this finding might be large medical expenses which cause financial worries to homeowners hence may force them to tap home equity.

The geographic region of residence was found as significant demographic determinant which influenced willingness to opt for RM in current study. Logistic regression result demonstrated that elderly homeowners residing in metro were significantly more willing to consider RM. The possible reason of this finding might be more collapse of familial values in metro and emergence of empty nest families and elder abuse which pressurize elderly to trade down housing wealth.

Awareness of RM was not found as a significant demographic predictor of interest in RM in current study. Although insignificant, but positive value of beta coefficient suggests that homeowners those were previously unaware about RM showed more interest in RM than aware homeowners. The possible reason for this finding might be lack of proper positioning of RM product among targeted segment. Mostly highly educated elderly know about this scheme those do not cash poor due to better retirement preparedness; hence not willing to opt for RM.

Employment status was found as significant economic determinant of showing interest in RM in current study. Logistic regression result demonstrated that employed respondents were significantly more willing than others to consider RM to fund later life. The possible reason for this finding might be need of funds for daily living expenses or liquidity constraints which force elderly to remain in workforce, still in old age.

Possession of Financial Assets was found as a significant economic determinant of showing interest in RM in current study. Logistic regression result depicted that cash/liquidity constrained homeowners were significantly more willing than others to consider RM. This finding reflects the real reason of origin of home equity withdrawal products that proposes “cash poor-home rich” may consider RM to fund later life, as it satisfies income and liquidity needs of elderly at regular interval.

Possession of Insurance Policy was found as a significant economic determinant of showing interest in RM in current study. Logistic regression result depicted that elderly homeowners possessing any kind of medical insurance were significantly less willing to consider RM to fund later life. A possible reason for this result is Indian insurance market is largely untapped and in old age due to large medical expenses whether known or contingent a heavy sum of money is required. This may give an urge to older homeowners who don’t possess any kind of health insurance to consider RM to bear unforeseen expenses.

Economic Wellbeing of Children was found as a significant economic predictor of showing interest in RM in current study. Survey result provided proper justification that elderly homeowners those children were financially well were more willing than others to consider RM. Possible reason for this finding may be bequest motive of elderly parents which stops them to keeping home on mortgage because in inflationary Indian economy where house prices are at peak; it’s always crucial task to build up own home.

Family income was not found as a significant economic predictor of showing interest in RM in current study. Although insignificant, but negative direction of β coefficient demonstrates that elderly homeowners those family income was higher were less willing to consider RM. Reason for this finding may be elderly who are residing with family have more family income, thus may have financial and emotional assistance from caregiver family members, thus not interested in product like RM. Thus, to be liquidity constrained or in absences of family support older may ready for uptake of RM as last resort.

Value of Home Equity was not found as a significant economic predictor of showing interest in RM in current study. Although insignificant, but negative direction of β coefficient demonstrates that willingness of older respondents for RM dropped down by increase in value of home equity. The possible reason for this finding might be less attractive value for money option by RM as maximum loan amount that can be availed on RM is one crore Indian rupees only irrespective of home value.

CONCLUSION

The primary purpose to carry out this study was to investigate whether Indian elderly homeowners are likely to dispose their housing wealth or not and if yes then, what demographic and financial factors influence this liquidation decision. Numbers of hypotheses are extracted to check whether demographic and financial factors significantly determine RM opting decision to fund later life. To solve research question cross-sectional data is collected from total of 410 older homeowners with help of self designed schedule. The result from current study demonstrates majority of homeowners don’t want to tap housing wealth but a segment of house rich elders wants to consume home equity in later life.

Results indicate that elderly considering an RM likely to be female, older, having poor health, childless or having girl child only, long life expectancy and resident of metro. On financial grounds elderly homeowners those are still in the workforce (employed), cash-constrained, not having any kind of insurance cover and those children are financially well are significantly more willing to opt for RM scheme.

This study recommends for policymakers and lenders that mere introduction of RM in portfolio of pension products is not sufficient. Redesigning of RM features appropriately may Result into large market of new emerging segment. Result reveals that there is a hidden potential of RM in India. More than 18% of surveyed respondents are willing to tap their housing assets, which is not a petty figure for lenders, and a potential segment with greying India in coming decades. Promotion of awareness of RM is not sufficient, it should be approached to real segment i.e. elderly who are childless, living alone or having empty nests, a cash-poor home rich, and residing in metro. Awareness promotion programs must be communicated to elderly with less education and also linked with counseling and a simple way of understanding which reduces complexity of elders in decision making. As the potential beneficiaries of RM are cash poor Indian elderly homeowners, limit on maximum amount of one crore Indian rupee should be abolished as it refrains high valued property owners to consider it and hinders prospective market to be large. Concern to pay unforeseen medical expenditure is found the main reason for uptake of reverse mortgage, thus there should be risen in loan to value ratio (LTV), so older may get sufficient amount to pay medical bills. In regime of growing aging population, housing wealth may act as a buffer in protection of older people in absence of social security and losing kith and kin support, henceforth government should make a diehard effort like subsidize homes, decrease in home loan interest rates, etc. so that each one should have his/her own home in old age, and if necessary may withdrawal equity to fund later life.

LIMITATION AND STUDY FORWARD

The current study does not study influence of attitudinal factors like debt aversion, bequest motive, etc. on elderly homeowner's RM opting willingness which might also have significant bearing. Future study may consider these factors along with demographic and financial factors and may get more insights.

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